



BGCS Annual Scientific Meeting 2023
28-30 June 2023, P&J Live, Aberdeen
Book of Abstracts

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Oral Presentations

Surgical outcomes of radical pelvic exenteration (PE) for solid organ gynaecological malignancies: results from a high-volume tertiary unit.

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Aims

To assess the outcomes of a radical approach, encompassing lateral compartment and bone resection in patients with advanced gynaecological malignancy requiring PE in a high-volume tertiary referral unit.

Background

PE in solid organ gynaecological malignancy has been confined to the central pelvic compartment. The exenteration envelope is expanding and gynaecological cancers invading the pelvic side wall +/- bone should now be considered resectable.

Methods

Retrospective study of consecutive patients undergoing PE for non-ovarian gynaecological malignancies between 2018-2022 in a tertiary referral unit. Patient and disease characteristics, and clinical outcomes were reviewed.

Results

31 patients underwent 32 PEs. The median age was 47. Median follow-up was 18 months. 87.5% had exenterations for recurrent, progressive or persistent disease after initial treatment (surgery and/or systemic anticancer therapy) with curative intent.

34.4% of patients underwent lateral compartment excision (internal iliac vessels +/- obturator internus/piriformis resection) +/- bone resection. Standard soft tissue resection in the unit has evolved to include nodal tissue between the obturator neurovascular bundle and levators. R0 rate was 84.4%. Of R1 resections, 1/5 was microscopically clear (0.5mm). Lateral compartment/ bone excision R0 rate was 72.7%. 30-day Clavien-Dindo IIIa, IIIb and IV rate was 12.5%, 9.4% and 6.3 %, respectively. 30-and 90-day mortality was 0%. The 1-, 2- and 3-year DFS was 73.9%, 57.9% and 43.8%. Overall survival at 3 years (n=16) was 56.3%.

Conclusions

Radical PE in advanced gynaecological malignancy is feasible and safe. Lateral compartment and bone excision should be considered and offers promising oncological outcomes.

Accuracy of Computed Tomography (CT) in Predicting Pre-operative Peritoneal Carcinomatosis Index Score (PCI) and its Correlation with Intraoperative PCI in Advanced Ovarian Cancer: a Double Blinded Prospective Study

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Aims

To investigate the correlation and agreement between CT PCI and intraoperative PCI in patients with advanced ovarian cancer.

Background

PCI is believed to have a role in tumour disease spread pattern and severity, prognosis, and selection for cytoreductive surgery (CRS). There is anticipation from recent studies that PCI could be a tool to determine tumour location, spread, severity and outcome.

Methods

A double blinded prospective study in the University Hospitals of Leicester including 26 patients with advanced ovarian cancer undergoing cytoreductive surgery from June 2021- July 2022. Peritoneal Carcinomatosis Index (PCI) was calculated preoperatively via CT and intraoperatively during the cytoreductive surgery.

Results

Cytoreductive surgery was performed for the 26 patients: 17 had interval debulking surgery and 9 had primary debulking surgery. The mean CT PCI and surgical PCI were 11.4 and 16.6 respectively. According to the Pearson coefficient, the correlation between the CT PCI and surgical PCI and it was found to be poor ($p=0.011$). Furthermore, the Intraclass Correlation Coefficient was 0.36 and showed that the level of agreement between the CT PCI and surgical PCI was poor. According to Kappa test, the level of agreement was shown to be moderate in region 0 and poor from regions 1-12.

The CT PCI cut off value was <16 for selecting advanced ovarian cancer patients for cytoreductive surgery. CT PCI was demonstrated to have a sensitivity of 94.7% and specificity of 42.9%.

Conclusions

CT PCI is not a reliable method alone to select advanced ovarian patients for cytoreductive surgery.

International variations in post-operative morbidity and mortality following gynaecological oncology surgery: an international, multicentre, prospective, Global Gynaecological Oncology Surgical

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Aims

To evaluate international variation in post-operative morbidity-and-mortality following gynaecological-oncology-surgery between high and low-middle-income-country settings.
Background.

45% of women with gynaecological-malignancies undergo surgery with curative intent, yet little comparative data exist on early outcomes in low-income-and-middle-income-countries (LMICs).

Methods

Multicentre, international prospective-cohort-study of women undergoing surgery for primary ovary/uterus/cervix/vulva/vagina/gestational-trophoblastic malignancies (NCT04579861). Multilevel-logistic-regression determined relationships within three-level nested-models of patients within hospitals/countries.

Results

Between January-2021, and November-2022, we enrolled 1820-patients from 75-hospitals in 27-countries (high-income 1078-patients, 11-countries; upper-middle-income 453-patients, 8-countries; lower-middle-income 174-patients, 5-countries; low-income 115-patients, 3-countries). Mean follow-up 55.7 days (SD=51, range=1-355) for high-income-countries (HICs) and 58.7 days (SD=53.6, range=2-363) for LMICs. Rate of minor (Clavien-Dindo I-II) and major complications (Clavien-Dindo III-V) was higher amongst LMICs (26.8%, 8.3%) versus HICs (26.3%, 7%). Mortality was double amongst LMICs (2%) versus HICs (1%). Increased risk of minor-complications was associated with previous history of laparoscopic-surgery (OR=1.435 95%CI=1.046-1.966, p=0.025), COVID-positive-status (OR=5.025, 95%CI=1.262-20.008, p=0.022), administration of bowel-preparation pre-operatively (OR=1.474, 95%CI=1.054-2.061, p=0.023), longer-surgeries (OR=1.253, 95%CI=1.066-1.472, p=0.006), greater blood-loss (OR=1.274, 95%CI=1.081-1.502, p=0.004) and intra-operative complications (OR=2.203, 95%CI=1.498-3.241, p<0.001). Minimal-access versus open-surgery (OR= 0.522, 95%CI=0.371-0.735, p<0.001) was protective. Increased risk of major-complications was associated with grade-of-surgeon (OR=2.982, 95%CI=1.509-5.894, p=0.002), longer-surgeries (OR=1.37 95%CI=1.128-1.664, p=0.002) and greater blood-loss (OR=1.398 95%CI=1.175-1.664), p<0.001). For every additional 1-hour of operating time, the risk of a minor-and-major-complications increased by 13%-and-19% respectively.

Conclusions

LMICs were associated with greater post-operative morbidity-and-mortality. Capacity to rescue patients from surgical-complications is a tangible opportunity for meaningful intervention.

Implementation of national ovarian cancer Quality Performance Indicators (QPIs) – the process and the outcomes

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Title

Implementation of national ovarian cancer Quality Performance Indicators (QPIs) – the process and the outcomes.

Aims

To share the experience of ovarian cancer QPI implementation in West of Scotland Cancer Network (WoSCAN).

Background

Scottish QPIs aim to drive improvement for patients by enabling comparative reporting on a population basis. Ovarian cancer QPIs were implemented in 2013, data are reported annually by region and nationally every 3 years with a survival analysis.

Methods

QPIs development and outcomes were reviewed between 2013 and 2021.

Results

1510 patients were included. 12 QPIs were developed with 2 retired, 1 redeveloped and 2 added. The WoSCAN regional results and the ranges across the seven diagnosing health boards will be presented. Improvements were seen between 2013-2014 and 2020-2021 in histological diagnosis prior to treatment, 63% (33.3-100%) to 97% (91.7-100%) and complete cytoreduction, 40.3% to 75% and genetic testing 58.6% in 2017-2018 to 82.2% in 2020-2021. Further improvements from 2020-2021 are required to meet target rates for surgery in advanced disease 58.1% (52-63.4%), platinum-based chemotherapy (79.9% (61.5-92%)) and adequate staging (87%). 3-year survival remained unchanged at 48.7% for 2013-2016; 49% for 2016-2018 and 45.5% for 2018-2020.

Conclusions

The process of QPI is a complex audit cycle of real-life data applied to the whole Scottish population, implementation of which leads to service improvements and standardisation. However, the process has not correlated with improvement in survival, highlighting a gap in data collection which is yet to be fully understood. Data on treatment timelines has been added and investigation of groups not receiving surgery and/or chemotherapy is ongoing.

PRIMA/ENGOT-OV26/GOG-3012 study: updated long-term progression-free survival (PFS) and safety

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Aims

To report updated ad hoc efficacy data from PRIMA.

Background

Niraparib showed PFS benefit as 1L maintenance therapy in the PRIMA primary analysis (data cut 17-May-2019) regardless of biomarker status.

Methods

This double-blind, placebo-controlled phase 3 trial evaluated niraparib in patients with newly diagnosed advanced ovarian cancer (AOC) with complete or partial response to 1L platinum-based chemotherapy (CT). Patients received niraparib or placebo QD (2:1 ratio). Stratification factors were best response to 1L CT regimen, receipt of neoadjuvant CT, and homologous recombination deficiency (HRD) status. Updated (ad hoc) PFS data (as of 17-Nov-2021) by investigator assessment (INV) are presented.

Results

Median PFS follow-up was 3.5 years. INV PFS for niraparib vs placebo patients was 24.5 vs 11.2 months (hazard ratio, 0.52; 95% CI, 0.40–0.68) for homologous recombination-deficient (HRd) patients, 13.8 vs 8.2 months (hazard ratio, 0.66; 95% CI, 0.56–0.79) for the overall population, and

8.4 vs 5.4 months (hazard ratio, 0.65; 95% CI, 0.49–0.87) for homologous recombination-proficient patients; results were concordant with the primary analysis. Niraparib-treated patients were more likely to be free of progression or death at 4 years than placebo-treated patients (HRd: 38% vs 17%; overall: 24% vs 14%). The most common grade ≥ 3 TEAEs in niraparib patients were thrombocytopenia (40%), anaemia (32%), and neutropenia (21%). MDS/AML incidence rate was 1.2% in both arms.

Conclusions

Niraparib maintained clinically significant improvement in PFS with 3.5 years of follow-up in patients with newly diagnosed AOC irrespective of HRD status. No new safety signals were identified.

Levels of BAF250a, PTEN, PIK3CA and Ki67 in normal cycling endometrium and endometriosis, a precursor of clear cell and endometrioid cancer of the ovary

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Aims

To determine the levels of BAF250a, PTEN, PIK3CA and Ki67 in endometrium and endometriosis, a proposed precursor of clear cell and endometrioid cancer of the ovary (OCCA and OEA).

Background

BAF250a is the protein product of ARID1A which is mutated in endometriosis-associated ovarian cancer. Ectopic endometrium can accumulate mutations including ARID1A, PTEN and PIK3CA, which may drive the transformation of endometriosis into OCCA and OEA. The role of BAF250a in eutopic endometrium is unknown.

Methods

A tissue microarray of 134 normal endometrium samples from different phases of the menstrual cycle was made, and 15 samples of endometriosis associated with OCCA and OEA were selected. Immunohistochemistry for BAF250a, PTEN, PIK3CA and Ki67 was performed on these samples.

Results

Epithelial levels of BAF250a ($p=0.0012$), Ki67 ($p<0.0001$), nuclear PTEN ($p=0.0012$) and cytoplasmic PTEN ($p=0.0007$) are significantly different in different phases of the cycle. There was a significant but weak correlation between epithelial BAF250a levels and Ki67 ($p=0.0022$, $r=0.2938$), nuclear PTEN ($p<0.0001$, $r=0.4683$), cytoplasmic PTEN ($p<0.0001$, $r=0.4619$), Estrogen receptor (ER) ($p<0.0001$, $r=0.4132$) and Progesterone receptor (PR) ($p<0.0001$, $r=0.3938$) levels. BAF250a was detected in 13 out of 15 endometriosis samples, even when absent in associated tumour, whilst Ki67 staining was negative. PTEN and PIK3CA were present in 5 samples.

Conclusions

BAF250a levels change throughout the menstrual cycle and are correlated with Ki67, ER and PR levels. BAF250a may be regulated by estrogen and progesterone. BAF250a is present in endometriosis associated with OCCA and OEA and is likely lost later in the malignant transformation pathway.

Implementation of the enhanced recovery protocols in patients undergoing cytoreductive surgery and hyperthermic intraperitoneal chemotherapy for metastatic ovarian cancer: a case-control study

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Aims

The aim of this study is to evaluate the implementation of the elements of enhanced recovery (ERAS) protocols in patients undergoing cytoreductive surgery and hyperthermic intraperitoneal chemotherapy (HIPEC) for metastatic ovarian cancer.

Background

HIPEC protocols have been effectively introduced for the management of patients with high grade serous metastatic epithelial ovarian or peritoneal cancer, at the time of interval cytoreductive surgery, thus improving the overall survival.

Methods

This is a case-control study involving retrospective analysis of prospective collected data from 25 patients undergoing cytoreductive surgery and HIPEC and 25 controls that underwent cytoreductive surgery only prior to introduction of HIPEC programme for metastatic ovarian cancer. All patients had undergone neoadjuvant chemotherapy prior to surgery. We compared the compliance for each element of the enhanced recovery protocol between the study groups.

Results

We found no significant difference in the patients' characteristics between the two groups. On a 14-element ERAS protocol there were no significant differences amongst the two groups in the implementation of 12 elements of the ERAS protocols (>90% for both groups). Use of a nasogastric tube was more frequently observed in patients undergoing surgery and HIPEC compared to those undergoing surgery only (44% versus 0%, respectively; $p < 0.001$). Significantly more patients in the group undergoing surgery and HIPEC were mobilised on the first postoperative day (96% versus 64%, respectively; $p = 0.005$). There was no statistically significant difference on the length of hospital stay and re-admission rates between the two groups.

Conclusions

Enhanced recovery protocols can be implemented safely in patients undergoing cytoreductive surgery and HIPEC for ovarian cancer.

An audit of the use of the Macmillan Holistic Needs Assessment following gynaecological cancer treatment

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Title

An audit of the use of the Macmillan Holistic Needs Assessment following gynaecological cancer treatment

Aims

To evaluate the first year of use of the Macmillan Holistic Needs Assessment following completion of treatment for gynaecological cancer within a tertiary gynaecological oncology centre.

Background

Macmillan developed the Holistic Needs Assessment (HNA), a simple questionnaire to help identify a patient's concerns, start a conversation about needs, develop a Personalised Care and Support Plan, share the right information, at the right times and to signpost to relevant services.

Methods

The use of the Macmillan HNA was introduced into routine practice at our cancer centre in January 2022. All patients completing their cancer treatment were offered the HNA to complete. Patients were initially invited by letter and then more recently by telephone call. There are multiple ways a HNA can be filled out to aid patient completion. An audit of uptake and outcomes of the HNA has been carried out since its introduction.

Results

Over a 13 month period 66 invitations to complete a HNA were made. 32 patients (48%) completed an assessment. 22 out of 32 patients (69%) required referral to other services. 59 individual referrals were made for those 22 patients, averaging 2.7 (range 1-5) referrals per patient. 15 different referral pathways were utilised. The most common referrals were to the National Exercise Referral Scheme 12 patients (37.5% referrals); Mindfulness course 11 patients (34%); Counselling 8 patients (25%).

Conclusions

The introduction of the Macmillan Holistic Needs Assessment has been readily accepted by patients. The results of this audit highlights the significant need for further and ongoing support of cancer patients when they complete their standard cancer treatment. Many of these referrals are made to third sector organisations and are not directly provided by or are available within the NHS.

Dostarlimab plus chemotherapy for the treatment of primary advanced or recurrent (A/R) endometrial cancer (EC): a placebo (PBO)-controlled randomised phase 3 trial (ENGOT-EN6-NSGO/GOG-3031/RUBY)

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Aims

RUBY (NCT03981796) evaluated efficacy and safety of the anti-PD-1 dostarlimab (D)+CP in A/R EC versus CP.

Background

Carboplatin-paclitaxel (CP) is standard-of-care for first-line treatment of primary A/R EC.

Methods

This phase 3, global, PBO-controlled study randomised patients with primary stage III-IV or first recurrent EC 1:1 to dostarlimab 500mg, or PBO, plus carboplatin AUC5 and paclitaxel 175mg/m² Q3Wx6, followed by dostarlimab 1000mg, or PBO, Q6W for up to 3 years. Primary endpoints were investigator-assessed PFS and OS. Graphical method was used for hypothesis testing of PFS in the dMMR/MSI-H population, then the overall population, and OS in the overall population. Safety was assessed.

Results

Of 494 patients randomised, 23.9% had dMMR/MSI-H tumours, 47.8% had recurrent disease; 18.6% and 33.6% had primary stage III and IV disease, respectively. PFS was significantly longer with D+CP versus PBO+CP among the dMMR/MSI-H (HR 0.28, 95% CI 0.162–0.495; P<0.0001) and overall populations (HR 0.64, 95% CI 0.507–0.800; P<0.0001). OS data were not mature but had a favorable trend in all populations. Discontinuation of dostarlimab or PBO due to TEAEs occurred in 17.4% and

9.3% of patients receiving D+CP and PBO+CP, respectively. The safety profile of D+CP was generally consistent with the safety profile of each drug.

Conclusions

D+CP showed a statistically significant and clinically meaningful increase in PFS in newly-diagnosed primary A/R EC, with substantial benefit in the dMMR/MSI-H population. An early trend toward improved OS was observed in all populations. Dostarlimab+CP represents a new standard-of-care for newly-diagnosed primary A/R EC.

Comparison of clinical HRD testing to whole-genome sequencing (WGS)-based HRD assays from NHS sequencing of high-grade ovarian carcinoma (HGOC) patients

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Aims

We compared the performance of three methods for detecting homologous recombination deficiency (HRD) using WGS of clinical specimens from HGOC.

Background

The Myriad myChoice[®] CDx (MMC) assay measures genomic instability score and is the clinical gold standard for defining HRD, but external funding will end in 2023. WGS provides more detailed genomic information, including HRD gene mutations and signatures, that can improve clinical prediction.

Methods

WGS of somatic (×80) and germline (×30) samples was performed by the NHS Genomics Medicine Sequencing Centres for patients from Addenbrookes (n=17) and Guys Hospitals (n=2). MMC testing from FFPE tissues was compared with Illumina Dragen and CHORD WGS HRD algorithms.

Results

HRD predictions were 10/17 for MMC, CHORD and Dragen, with 2 discrepancies between WGS and MMC. WGS detected deleterious HRD mutations in 6/17 cases (35%) in ATM, BRCA1/2, BRIP1 and RAD51C genes. Illumina Dragen and CHORD predicted HRD in the same cases, and two cases were discrepant with MMC: (1) a clinically platinum-refractory case proficient by WGS and (2) germline deleterious BRIP1 mutation deficient by WGS and proficient by MMC. In 12/19 (63%) patients, WGS reported additional predictive or prognostic mutational processes, including structural variants or copy number aberrations in AKT2, ARID1A, BCL9, CCNE1, FGFR2, MECOM, NF1, PTEN and RB1. Turnaround reporting time was MMC 30 (IQR 27–35) versus WGS 42 (IQR 33–47) days (n=11).

Conclusions

WGS is feasible in the NHS for detecting HRD and has similar performance to MMC with improved HRD gene mutation detection and discovery of additional biomarkers.

Posters

P-1

A case series on the management and survival outcomes of patients with Bartholin's gland carcinoma in a tertiary care centre

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Aims

To evaluate the management and outcomes of Bartholin's gland cancer

Background

Bartholin's gland carcinoma (BGC) is rare with an annual incidence of 0.1 per 100,000 women. Treatment approaches include surgery, chemotherapy, radiotherapy or a combination. Level I evidence on the optimal management is lacking due to the rarity of the disease and only case studies are reported in the literature.

Methods

Single institution retrospective review of patients with histologically proven BGC from June 2004 to September 2022. Extracted data was analysed using IBM SPSS v27 and survival probabilities were estimated using Kaplan-Meier method.

Results

Seven patients were identified with a mean age at diagnosis of 52 years. Vulval pain and swelling were the most common presenting symptoms. Three (43%) patients had a significant delay to diagnosis of >12 months from initial presentation. The majority (86%) of patients had squamous cell carcinoma and one patient (14%) had adenoid cystic carcinoma. Three women had stage III disease, while two each had stage I and stage II. Stage I disease was treated by surgery alone and stage II-II disease received primary chemoradiation. Median follow-up was 42 months. The 5-year recurrence free survival and overall survival were 83% and 75% respectively. Preservation of anal sphincter function and difficulty achieving clear margins were the most commonly stated reasons for avoiding surgery.

Conclusions

Early recognition of this rare malignancy is necessary to decrease delay in diagnosis. Primary chemoradiation is an acceptable treatment option for advanced BGC with the benefit of decreased morbidity.

Presentation of a giant 7-centimetre Nabothian cyst mimicking cervical malignancy

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Objective

To share presentation of a giant Nabothian cyst mimicking a large cervical tumour, highlighting this unusual differential. High-quality images included to illustrate the case.

Background

Nabothian cysts are benign cervical mucous retention cysts. Generally small and rarely growing >4centimetres – the majority being self-limiting and requiring no medical intervention.

Case report

A 45year old lady attended primary care for routine cervical screening. On speculum assessment, no discrete lesions; but cervix noted to be uniformly enlarged – prompting red-flag referral to gynae-oncology. Associated pressure symptoms; but no bleeding. Repeat examination confirmed previous findings; and recent smear had returned as high-risk HPV negative. MRI pelvis was undertaken, reporting a 7.1x6.1 cm cystic tumour with proteinaceous content arising from the cervix. MDT discussion and imaging review concluded an enlarged Nabothian cyst as the likely aetiology. At subsequent review – with patient consent and in the clinic setting – the tense cyst was incised, expelling 300millilitres of mucin. Cyst content was sent for culture and further MRI was scheduled at 3month interval to ensure no re-accumulation.

Discussion

A giant Nabothian cyst is rare. MRI pelvis with MDT review is the mainstay of diagnosis. Treatment options include expectant management; or simple incision and drainage – guided by patient symptoms. In cases of recurrent Nabothian cysts, formal surgical excision has been described.

Conclusion

Giant Nabothian cysts represent a diagnostic challenge – mimicking presentation of malignant disease. Our case demonstrates the feasibility and safety of outpatient management in a symptomatic woman.

A novel and collaborative technique: Utilising combined real-time ultrasound and direct hysteroscopic guidance to facilitate safe intra-uterine brachytherapy applicator insertion in patient with locally-advanced cervical cancer and significant endocervical stenosis

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Aims

Whilst post chemo-radiation (CCRT) ultrasound-guided insertion of intra-uterine brachytherapy (IUBT) applicators has been described, we demonstrate the feasibility and safety of a novel technique – utilising a combination of both real-time ultrasound (US) and direct hysteroscopic guidance to achieve successful IUBT applicator insertion in a challenging case.

Background

Locally-advanced cervical cancer is treated with CCRT, the radiotherapy component comprising delivery of both external beam (EBRT) and IUBT. Following initial pelvic irradiation via EBRT, secondary tissue fibrosis can however obliterate the vagina and/or endocervical canal – making accessing the uterine cavity to insert brachytherapy applicators complex and high-risk. Attempts can result in inadvertent uterine perforation; and/or abandonment of both the procedure and IUBT. Omission of IUBT confers 10% reduction in survival.

Methods

We present our approach to safe IUBT applicator insertion in a 32year old with stage IIA1 SCC cervix and previously failed attempt, abandoned due to significant post-EBRT stenosis. We share high-quality images to illustrate our technique.

Results

Under GA, trans-abdominal US was performed by a Consultant Radiologist – obtaining clear sagittal views. Concurrently, saline hysteroscopy was undertaken by a Consultant Gynaecological-Oncologist. Combined real-time US and hysteroscopic guidance enabled controlled endocervical dilatation and scope advancement, navigating fibrosis under vision, avoiding false passage or perforation. The IUBT applicator was subsequently inserted under continued US guidance, along the same pathway, safely into the uterine cavity and secured.

Conclusions

Our case promotes a collaborative approach to complex Gynaecological-Oncology cases; combining skills of the Oncology, Radiology and Surgical teams to maximise patient safety and optimise outcome.

Audit of cervix cancer radiotherapy at Leeds against ESTRO/ESGO proposed quality indicators

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Aims

Audit radical cervix patients treated at Leeds in 2022 against proposed quality indicators (QIs) for cervix radiotherapy.

Background

Adaptive MR-guided brachytherapy after external beam radiotherapy (EBRT) with concurrent cisplatin is standard of care for locally advanced cervical cancer. ESTRO/ESGO identified 19 QIs to promote evidence-based radiotherapy for cervix cancer, due to be published this year.

Methods

Treatment received by 43 cervix cancer patients in 2022 was assessed against QIs.

Results

We met proposed thresholds (in brackets) for 14 of the 19 QIs. The local clinical protocol complies with QIs for all pre/post treatment care and EBRT delivery. We delivered a brachytherapy boost to 34 (≥10) patients. 98% (≥75%) of patients started primary radiotherapy within 42 days of referral. 79% (≥95%) received a brachytherapy boost and 32% (≥40%) were treated with intracavitary/interstitial applicators.

The combined EBRT and brachytherapy dose planning aim for the high risk clinical target volume (HRCTV) D90 >90Gy was met for 91% (≥70%) of patients, however 68% (≤30%) received >95Gy. 26/34 patients had a HRCTV volume <30cc, which may explain higher target doses and low interstitial needle use in this group. Dose planning aims were met for all organs at risk except the bladder D2cc with 68% (≥70%) <80Gy and 82% (≥90%) <85Gy, although all plans met the EMBRACE II mandatory constraint of ≤90Gy.

Conclusions

We are performing well compared to the EMBRACE II clinical protocol and the proposed QIs. An investigation into interstitial needle use to reduce bladder dose is underway.

A retrospective audit of Uterine papillary serous cancer outcomes in West London

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Aims

Establishing the role of adjuvant chemotherapy in Uterine papillary serous cancer (UPSC).

Background

UPSC is a rare and aggressive subgroup of endometrial cancer, more commonly occurring in older women, with a poorer prognosis. Guidelines for this have been controversial with options in early-stage disease including surgery with or without chemotherapy and/or radiotherapy, with resultant differences in practice.

Methods

In collaboration with another London cancer centre we collected data at the West London Gynaecological Cancer Centre to closer examine the effects of these different practices, predominantly around the use of adjuvant chemotherapy, identifying 207 patients treated for UPSC between 2006 and 2017 between the two centres.

Results

Of these, 129 had stage I disease, with 75 received adjuvant chemotherapy (63 receiving single agent carboplatin); 5-year OS in the chemotherapy group was 61% vs 54.4% in the no chemotherapy group. Within the Stage III/IV group of 79 patients, median progression free survival with combination Carboplatin/Paclitaxel was 17.9mths vs 13.5mths in those receiving carboplatin alone, although overall 5yr survival was similar at around 10%.

Conclusions

Our data appeared to show a survival benefit in stage I disease with adjuvant single agent carboplatin chemotherapy. It also appeared to show a trend towards a survival benefit in late-stage disease with carboplatin/paclitaxel over carboplatin alone. Whilst overall numbers were low with non-statistically significant results, the results would corroborate the subgroup analysis of the PORTEC-3 serous endometrial cancer cohort.

A retrospective service evaluation of margins used to create planning target volume (PTV) in definitive external beam image guided radiotherapy (IGRT) for cervical cancer at the Royal Devon University Healthcare NHS Foundation Trust

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Aims

Our aim was to analyse the PTV used for cervical external beam radiotherapy and to determine whether smaller margins could be used without affecting clinical target volume (CTV) coverage to reduce toxicity.

Background

The significant organ motion during pelvic radiotherapy is well recognised and locally the INTERLACE protocol for IGRT using intensity modulated radiotherapy (IMRT) has been adopted with 2cm or 3cm PTV set-up margin with a 'plan of the day' model.

Methods

All patients receiving radical definitive radiotherapy for cervical cancer at the Royal Devon and Exeter Hospital between 1/3/2021 and 31/12/2021 were included (n=13). They received 45 gray (6/13) or 55 gray (7/13) in 25 fractions. The radiographer-led choice between 2cm or 3cm margins with daily on-set cone beam computed tomography (CBCT) was reviewed. Based on CBCT, a margin calculation was performed to determine what margin was required to cover the disease.

Results

Results showed 23.1% (3/13) of patients were adequately treated with 2cm margin throughout, described as non-movers. These 3 patients could have been adequately treated with a 1.5cm margin; a 1cm margin would cover 77.3% of fractions. The remaining 10 patients required the 3cm margin for 15.9% of fractions (mean 3.9/25, range 2-8). For these patients a 1cm margin would cover 31.8% of fractions and 1.5cm 66.6%.

Conclusions

In conclusion a smaller set-up margin can be utilised, particularly in 'non-movers', without compromising disease coverage. Reducing the PTV allows decreased dose to organs at risk, reducing likelihood of toxicity but further analysis of dosimetry and radiographer plan selection is required

Developing a novel, multi-professional pre-brachytherapy assessment for gynaecological patients within a non-surgical oncology centre

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Aims

To develop a safe, patient-centred, holistic pre-brachytherapy assessment through multi-professional collaboration, education and team-working.

Background

Gynaecological brachytherapy is a specialised procedure that often requires multiple anaesthetics and ward care following chemotherapy and external radiotherapy. This is a vulnerable time causing anxiety and distress for patients. Velindre Cancer Centre has a single theatre/brachytherapy suite with a contracted anaesthetic service. There was a need to develop a safe and effective pre-brachytherapy assessment.

Methods

A multi-professional anaesthetic assessment and patient education session was devised, provided by anaesthetic and theatre nursing staff. Nursing staff underwent additional training including degree-level clinical assessment and radiology requesting. All staff had in-house training and experiential learning. Patient experience was surveyed by questionnaire.

Results

Around 40 patients per year are treated (c.120 anaesthetics). The pre-brachytherapy assessment was devised to be undertaken one week before the first anaesthetic. This included a comprehensive medical assessment within the theatre department, and a discussion about the type of anaesthetic, analgesia, ward admission and care with applicators in place, MRI scan, and brachytherapy treatment. A questionnaire survey with 30 respondents showed that 100% of patients felt they were given the opportunity to discuss relevant issues relating to their diagnosis and treatment. 100% felt well informed about the brachytherapy procedure and 100% had the opportunity to ask further questions. Free text comments mentioned a caring service with excellent communication from the anaesthetist and theatre staff.

Conclusions

A multi-professional pre-brachytherapy holistic assessment provides a safe, effective service that meets patients' needs in a specialised area.

Mucinous Cystadenocarcinoma of the Peritoneum

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Aims and Background

Recurrent mucinous cystadenoma is rare, with few cases of retroperitoneal and only one of primary peritoneal mucinous cystadenocarcinoma reported in the literature. We discuss distinct pathology associations and acknowledge challenges faced regarding case management.

Methods

Our 32-year-old female patient previously underwent left salpingo-oophorectomy for mucinous cystadenoma. An incidental left subdiaphragmatic cystic mass was demonstrated on recent MRCP. Histopathology following resection reported a primary peritoneal mucinous cystadenocarcinoma of Mullerian origin. At MDT, new primary or linked recurrent pathology fuelled concerns regarding staging, follow up and adjuvant treatment options.

Results

Evolving research suggests these conditions may represent a spectrum of disease originating from the Mullerian compartment. Ovarian surface epithelium is derived from coelomic epithelium during fetal development, which itself is derived from the mesoderm and consists of the epithelial lining of the body cavity. Additionally, it covers what will become the peritoneal lining and the area that will subsequently develop into the gonadal structures.

There have also been multiple theories regarding the development of mucinous carcinomas in general terms, which include the adenoma-carcinoma sequence (whereby a tumour undergoes malignant transformation from benign epithelium to invasive carcinoma), germ cell origin (although most mucinous carcinomas have no teratomatous components), mucinous metaplasia of surface epithelium, or an association with endometriosis.

Conclusions

These interesting pathologies are ultimately unlikely to be related. This case demonstrates a rare pathology, which warrants further research in its own right.

Impact of the Covid-19 Pandemic on the detection and management of Cervix and Uterine Cancer in England: a population-based study

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Aims

To evaluate changes in cervical and uterine cancer diagnosis and treatment pathways during and following the pandemic.

Background

The COVID-19 pandemic required rapid changes in healthcare delivery, requiring national prioritisation of resource. This impacted on access to cancer screening and diagnostic tests, and recovery is still ongoing.

Methods

Data were extracted from two population-based databases (National Radiotherapy Dataset, Rapid Cancer registration Dataset). Monthly trends and percentage changes between January 2019 to June 2022 were calculated for cancer incidence, referral pathways and treatments for all centres in England.

Results

In 2019 there were 2584 women diagnosed with cervical cancer, and 8039 with uterine cancer in England. This reduced in 2020 by 13.8% (95% CI 8.8, 18.6) and 6.9% (95% CI 3.9, 9.8) respectively. Diagnosis in women below 50 years was reduced by 17.9% (95% CI 11.5, 23.8) and 12.4% (95% CI 1.2, 22.4). In 2020, there was a significant reduction in all cancer treatment modalities used including radiotherapy, brachytherapy, chemotherapy and surgery. Resection was undertaken for cervical cancer in 984, 762, 922 women in 2019, 2020 and 2021 respectively, and for uterine cancer in 6818, 6215, 6843 cases.

Conclusions

Cervix and uterine cancer diagnosis pathways were severely disrupted during the pandemic. Although numbers are improving, they are yet to recover to pre-COVID-19 levels. Cervix cancer screening and urgent gynaecology referrals for suspicious symptoms need to be encouraged and prioritised, especially in young patients.

P-12 and BGCS Short

Review of MRI image-guided adaptive brachytherapy (IGABT) for radical treatment of cervical cancer at the Velindre Cancer Centre

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Aim

Retrospective analysis of outcomes following implementation of MRI-IGABT in Velindre Cancer Centre.

Background

Despite brachytherapy's pivotal role in cervical cancer treatment, techniques remained unchanged until the implementation of IGABT.

Following publication in 2009 of RCR guidance, the Velindre Cancer Centre brachytherapy team phased in IGABT, initially with pre-brachytherapy MRI and intra-operative ultrasound followed by CT verification of applicator position. In March 2016 the team moved to MRI-IGABT, adding interstitial treatment in 2019.

Methods

Electronic records were used to review outcomes. Data were collected spanning March 2016 to March 2021 including toxicity, recurrence and overall survival (OS). Outcomes were compared to patients treated from 01/09/2015 to 29/02/2016 (control group), RetroEMBRACE results and our previously published series from 1999-2004 (historical controls).

Results

- 193 patients were identified with FIGO stages IB-IV cervical cancer and pathological sub-types of squamous, adeno and small cell.
- 176 patients were treated with MRI-IGABT.
- 17 patients were in the control group.
- Standard treatment comprised external beam radiotherapy 45Gy/25 fractions followed by brachytherapy 21.3Gy/3 fractions.
- 5-year OS was 65% for MRI-IGABT; the same as RetroEMBRACE results and an improvement from historical controls of 55%.
- 5 year local control was 85% compared to 89% in RetroEMBRACE and 67% in historical controls.
- Using the LENTSOMA grading system, 82.4% of the control group developed any grade of radiation toxicity versus 56.3% in the MRI-IGABT group.

Conclusion

MRI-IGABT has allowed customised dose escalation to the target cervical cancer with resulting improvements in local control, overall survival and radiation toxicity.

P-13

Can an improved understanding of the local vulval cancer population inform the development of targeted quality improvement initiatives in the North East?

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Aims

To better define the clinicopathological demographics of the vulval cancer (VC) population of the North East and Cumbria, informing a statistical model to assess the impact of these demographics on overall survival (OS) in VC.

Background

Due to its rarity, limited data exist on the VC patient population and particular high-risk subgroups.

Methods

All cases of VC diagnosed in the North East and Cumbria between 2011-2020 were included. Clinicopathological patient data (age, stage at diagnosis, histological subtype, completion of standard treatment, and route to diagnosis) alongside Index of Multiple Deprivation (IMD, generated by postcode) were retrospectively extracted from an electronic MDT database. Kaplan-Meier analysis informed construction of a Cox Proportional Hazards model.

Results

406 patients were included, with a median age of 70.0 years (21.0-97.4). 290 patients (71.6%) were classified as moderate/high deprivation (IMD \geq 5). The majority of cancers were squamous cell carcinomas (84.7%). Over two thirds (68.9%) of cancers were diagnosed at stage I. Increasing age ($p<0.001$), advanced stage ($p<0.001$), and non-standard treatment ($p<0.001$) were associated with worse OS in the Kaplan-Meier analysis. In the multivariate analysis, deprivation (IMD \geq 5) was a negative predictor for OS after adjusting for age, stage, and standard management (HR 1.73, $p=0.005$, 95% CI 1.15, 2.47).

Conclusions

Deprivation is prevalent amongst VC patients in our region. Moderate/high deprivation, increasing age, advanced stage, and non-standard treatment are independent predictors of poor OS in VC. This analysis justifies further research into specific barriers to positive outcomes for deprived VC patients, with a view to develop targeted quality improvement interventions.

Using Technology Enhanced learning methods to improve the effectiveness of undergraduate teaching on the Gynaecological-Oncology MDT

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Background

The multi-disciplinary team (MDT) approach to cancer care is well-established, with the MDT meeting at its centre. A recent timetable re-design for undergraduate medical students at a district general hospital, enabled students to begin attending the Gynaecological-Oncology MDT meeting during their gynaecology rotation. Feedback about the value of this teaching experience was disappointing.

Initial feedback

On their end of clerkship evaluation, 62% of students reported the MDT meeting to be the 'least useful' aspect of their rotation. Qualitative comments included that it was 'difficult to follow', 'high level' and 'didn't have enough knowledge to keep up'. Students reported difficulty engaging in the meeting's virtual format. Feedback from staff echoed these same themes.

Aim

To improve the effectiveness of teaching regarding the Gynaecological-Oncology MDT and meeting

Educational Improvement Project

We have created a virtual learning package that can be used in preparation for attendance at the MDT meeting. The package introduces the concept of the MDT. The role of key MDT members is taught through recorded interviews. A simulated meeting of four cases puts the concepts into action, which students can pause or re-play. It concludes with tips for foundation doctors such as when and how to refer patients to the MDT.

Intended evaluation

We will be piloting this teaching package with our next cohort of students and evaluating its effectiveness with a ten-question survey, containing subjective and objective assessments of its effectiveness. Should the package prove to be effective, then its virtual format lends itself to easy wider roll-out.

Development of a training tool to improve training opportunities in operating theatres

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Background

Operating theatres require complex, multidisciplinary teams, many of whom are training. It can be challenging to meet a variety of training needs, with time constraints and prioritising patient safety.

Aim

To evaluate current practices around discussion and division of training opportunities in operating theatres and develop a tool for a quality improvement project.

Methods

Survey created in Google Forms and disseminated to personnel within operating theatres throughout the South West. Data analysed using MS Excel.

Results

88 responses from staff working in 9 different NHS Trusts; all multidisciplinary groups working in theatres were represented. Training opportunities and needs were discussed with supervisors prior to theatre sessions 'always' or 'often' by 36.4% of those who responded. Three-quarters (76.2%) said training needs were 'rarely' or 'never' discussed within the team prior to starting theatre sessions and 75% of respondents felt able to voice their learning/training needs. Cited barriers to training included time (87.5%), complexity of cases (61.4%) and lack of discussion of training needs (37.5%). A change idea, from qualitative analysis of free text, was to introduce a discussion about training in the theatre safety brief to break down some of the barriers to training. We developed a training checklist tool and are measuring its effectiveness in PDSA cycles. Further data will be available for presentation.

Conclusion

Training is often not openly discussed and opportunities are missed. We have developed and are testing a training tool for theatre briefing to facilitate training discussions and enable contingency planning.

Improving team resilience in gynaecological radiotherapy through education, training and role extension

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Aims

To develop a robust and flexible gynaecological radiotherapy service and to meet developing clinical service needs. To evaluate the impact of the change.

Background

Velindre Cancer Centre provides a regional radiotherapy service for SE Wales (population 1.5 million) and a supra-regional brachytherapy service for South Wales (2.2 million). With a consultant clinical oncologist workforce of 2.2 whole-time equivalents, there was a need to build resilience to develop and modernise the service.

Methods

External and in-house education and training, recruitment, role extension and service development. Staff survey to identify the impact on the patient pathway.

Results

Nine staff from four professions (nursing, radiography, physics, physiotherapy) undertook 15 MSc advanced practice modules including clinical examination, complex decision making and radiotherapy contouring. Other training included prescribing, informed consent, radiology requesting, menopause, acupuncture and Pilates. Additional brachytherapy and physiotherapy posts were created, and a weekly radiotherapy peer review meeting was established.

Role extension is now fully embedded into the radiotherapy patient pathway for pre-habilitation and radiotherapy treatment. Ninety-six patients per year have external beam radiotherapy; 113 have brachytherapy. Trained staff currently undertake annually: 435 on-treatment radiotherapy reviews; 110 intra-operative brachytherapy ultrasounds; c.100 concurrent chemotherapy prescriptions; 30 radiotherapy contours; 24 MRI scan requests. Quarterly figures for vaginal vault brachytherapy include: 12 vaginal applicator sizing appointments; 52 vault applicator insertions; 18 vaginal dilator education sessions. Staff report greater understanding of each other's roles and professional enrichment.

Conclusions

Multi-professional education, training and role extension have sustained and developed the service and improved resilience within gynaecological radiotherapy.

Video-analysis of surgical phases, errors and performance in laparoscopic and robotic-assisted total hysterectomies: A study design

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Aim

To quantify surgical skills and errors within minimal invasive hysterectomy and its association with histopathological and clinical outcomes

Background

Advanced minimally invasive hysterectomy in oncological settings is often grouped for analysis based on morbidity and mortality data (MMD). However, MMD has not been able to reduce surgical errors and adverse clinical outcomes, because it doesn't identify errors enacted during the intra-operative periods.

Methods

This is an international multicenter observational prospective cohort study. Power calculations were based on error scores in accordance with a previous oncological rectal cancer study, requiring the study to include at least 100 minimal invasive hysterectomies.

Inclusion criteria include any patient undergoing laparoscopic or robotic-assisted hysterectomy (+/- bilateral or unilateral salpingectomy/salpingo-oophorectomy +/- bilateral or unilateral (sentinel) pelvic lymphadenectomy) for oncological indication. Procedures will be videorecorded and assessed for errors per surgical phase and clinical outcomes by experienced assessors.

Results

Primary Objective: Number of errors in minimal invasive oncological hysterectomy using validated methodology.

Secondary objectives: Correlating error scores to surgical experience and clinical outcome, including 30-day morbidity, length of hospital stay and readmission.

Conclusion

Procedures are often grouped for analysis, which we believe oversimplifies the inherent variability. We believe that if the null hypothesis is rejected surgical and oncological outcomes are related to surgical performance and therefore can be predicted by an objective assessment tool. This can have implications for the design and interpretation of further surgical trials involving oncological minimal invasive hysterectomies.

P-18 and BGCS Short

Setting up an international gynaecological cancer research project: A bid to increase collaborative research amongst understudied, burdened populations

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Aims

Describe the important considerations in setting up an international gynaecological cancer research project.

Background

Successful implementations of research advances over decades have enabled drastic reductions in incidence and mortality of various cancers in Western countries. Unfortunately, deaths from cancers in the developing world remain very high, including preventable cancers such as cervical cancer. Given the genetic nature of cancer, it is imperative that research is encouraged in populations from the developing world, in order to capture any molecular differences that may arise from ethnic variations.

Methods

We describe our learning from setting up the PECCaN study, an international project on cervical cancer involving three teaching hospitals in Nigeria.

Results

Funding: several funding bodies provide dedicated opportunities for global health projects.

Approvals: familiarity with local and national ethical approval processes.

Social and cultural factors:

Language barriers: need careful consideration and translation of paperwork where necessary.

Coercion: high poverty rates can cause undue financial influence; thus, participant compensation must be carefully considered.

Paternalistic doctor-patient relationships can introduce a risk of influencing participants. Consistency of information is fundamental.

Distrust of foreign medical/research individuals: this has been caused by historical events and can only be addressed by clarity of information provided and avoiding condescension.

Credits and acknowledgements: Appropriate credit to local collaborators helps create a lasting impact.

Conclusions

International research collaboration with developing countries is achievable and important to improve gynaecological cancer outcomes globally.

Improving cancer genetic care through co-production: a scoping review

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Aims

To identify existing methods of co-production in the context of cancer genetic testing to help improve future work.

Background

The Demonstration of Improvement for Molecular Ovarian Cancer Testing (DEMO) is one of the national IMPROVE-UK quality improvement pilots led by the Pan-Birmingham Gynaecological Cancer Centre and CRUK Cambridge Centre. It aimed to improve genetic testing uptake and success rates. A key component was co-production with patients to produce a multilingual multimedia information package to improve understanding of genetic testing and its results after the diagnosis of cancer.

Methods

A literature search of CINAHL, Embase, PubMed and OVID MEDLINE was performed, with keywords related to co-production and cancer genetic testing (prospective registration at <https://doi.org/10.17605/OSF.IO/J9TU3>). All empirical studies were included with no limitations on study design and language. Results were screened by two reviewers and disagreements were reconciled by a third reviewer. Full-text of the included studies were summarised.

Results

Of the 762 publications screened, 10 were included. Most included studies used qualitative techniques such as focus groups, semi-structured interviews and surveys. One randomised trial was identified, which compared a user-focused genetic test report with the generic national test report template. The user-focused design was associated with better comprehension with no difference in perceived risks. Two studies recruited patients from specific ethnic groups, but none reported specific measures to ensure diversity of their co-production groups.

Conclusions

We plan to develop a sustainable and diverse co-production model based on our experience from DEMO and the results of this scoping review.

(247 words)

Mainstreaming genomics testing in the Nottingham Cancer Centre 2015 – 2022, a service evaluation. Germline and Tissue testing for women with serous ovarian cancer, service implementation and outcomes of 649 women tested since service introduction in 2015.

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Aims

A service evaluation of mainstreaming genomics testing within Gynaecology services since 2015. To assess how many women take up the offer of testing, who consents for the test & how many women have a positive result. Review any modifiable factors associated with inconclusive tissue testing results.

Background

Women with germline or tissue genomic mutations may be eligible for additional chemotherapeutic options and recent trials (PAOLA-1 and SOLO1/2) suggest this confers survival benefits. Identifying those women with genomic mutations is therefore of the upmost importance. The service is co-ordinated by one Gynaecology consultant so all test requests and results go via them. This maximises testing opportunities. Explicit written consent is sought before testing.

Methods

The prospective genomics test database, and hospital information systems were interrogated. Staff member undertaking consent process, genomics results, stage, grade and cell origin of ovarian cancer were recorded. Use of neo-adjuvant chemotherapy (NACT) was identified.

Results

649 women underwent germline testing & 190 women tissue testing. 62 women had a germline pathogenic mutation. (BRCA 1 – 24 (3.7%), BRCA 2 – 34 (5.2%), other – 4 (0.6%)). 49 women had a somatic mutation. 13 women had an inconclusive homologous recombination deficiency (HRD) result (BRCA negative) & 8 women had an unsuccessful HRD/BRCA tissue test. All 21 of those women had undergone NACT. Clinical nurse specialists (CNS) undertook consent for 85% of tests.

Conclusions

9% of women had a germline BRCA mutation identified. These women will be eligible for Poly ADP-ribose polymerase (PARP) inhibitor therapy. Their family members may be eligible for screening, chemoprophylaxis and risk reducing surgery as part of cancer prevention strategies. The CNS team are integral to the mainstreaming service, highlighting their importance within the team. A future quality improvement project could assess if tissue testing can be optimised further to minimise inconclusive results.

Somatic genetic characteristics of tumours from FANCI c.1813C>T carriers are characteristic of high-grade serous ovarian carcinoma

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Aims

Determine somatic genetic characteristics of high-grade serous ovarian carcinoma (HGSC) tumours from FANCI c.1813C>T carriers.

Background

We recently reported a new candidate ovarian cancer (OC) predisposing gene, based on the discovery of FANCI c.1813C>T; p.L605F found to encode a likely pathogenic and unstable protein identified in the germline of familial OC cases. Cells expressing FANCI p.L605F protein were more sensitive to cisplatin, but not to the poly (ADP-ribose) polymerase inhibitor, olaparib, compared to wild-type cells.

Methods

Loss of heterozygosity analysis of FANCI c.1813C>T was performed by Sanger sequencing of tumour tissue. Analysis of exome sequencing data from tumours of FANCI c.1813C>T carrier cases was performed to identify somatic alterations characteristic of HGSC: variants in commonly mutated genes; copy number alterations; and mutational signatures.

Results

Loss of heterozygosity of FANCI c.1813C>T was observed in 5/9 (56%) of cases. One case showed loss of heterozygosity in bilateral OC tumours, suggesting loss of the wild-type allele occurred early in tumour development. Analyses of commonly mutated genes identified somatic driver TP53 variants in 11/13 (85%) of cases, and variants in BRCA2 (3/13;23%), CDK12 (1/13;8%), and FAT3 (3/13;23%). Global copy number alterations were extensive in tumours from FANCI c.1813C>T carriers. Two tumours (2/11;18%) harboured amplification of CCNE1. The tumours exhibited somatic mutational signatures previously identified in HGSCs, where signature 3 (associated with homologous recombination deficiency) was identified in 6/7 (86%) tumours.

Conclusions

Our findings suggest that HGSCs from FANCI c.1813C>T variant carriers exhibit molecular genetic characteristics like HGSC, suggesting similarities in etiology of disease.

Compartment-specific multiomic profiling of ovarian carcinosarcoma

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Aims

To identify shared and compartment-specific molecular events in OCS

Background

OCS is an exceptionally aggressive ovarian cancer type with distinct carcinomatous and sarcomatous components. Absence of molecular profiling studies has hindered identification of therapeutically targetable biology

Methods

We performed matched whole exome sequencing, RNA sequencing and microRNA profiling of paired carcinomatous and sarcomatous samples

Results

Paired samples demonstrated substantial genomic similarity by genome-wide copy number estimates (median $\rho=0.69$), with shared TP53 mutations in 11 of 12 pairs. CCNE1 gain was common (50% of carcinomatous samples) and occurred more frequently than in high-grade serous ovarian carcinoma ($P=0.004$). ChrX loss was also common. Specific genomic regions were recurrently altered between pairs, with regions containing GNAS and SRC consistently gained within sarcomatous samples. 1,477 mRNAs were significantly differentially expressed between compartments; clusters of identified genes were enriched for processes reflective of OCS biology, including epithelial to mesenchymal transition (EMT) and myogenesis. KRAS, WNT and TGF β signalling components were also significantly enriched within mRNA clusters. Sarcomatous samples demonstrated increased MPAS transcriptomic score of MAPK activity ($P=0.042$). Carcinomatous and sarcomatous samples showed global differences in microRNA expression, with principal component analysis separating samples by type rather than by patient. Clusters of significantly differentially expressed microRNAs were enriched for ChrX and Chr1 targets, alongside EMT-associated gene targets (SIRT1, ZEB2). The sarcomatous compartment demonstrated significantly fewer CD8-positive infiltrating cells ($P=0.006$).

Conclusions

Carcinomatous and sarcomatous compartments of OCS demonstrate substantial genomic similarity, but also harbour numerous compartment-specific molecular features.

Homologous recombination deficiency (HRD) testing for patients with advanced high grade tubo-ovarian cancer: An audit of factors influencing test success from samples sent from Northwest London Pathology

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Aims

We audited the HRD testing process for tests sent from Northwest London Pathology to the genomic laboratory hub between December 2020 and January 2023.

Background

Testing for tumour BRCA and homologous recombination deficiency (HRD) is recommended on the NHS genomic test directory for patients with advanced high-grade epithelial ovarian cancer. Results guide first line treatment options.

Method

We identified 125 patients who underwent testing and analysed factors influencing test success.

Results

85.6% of patients received a result on their first test. After accounting for repeats, 148 HRD tests were performed. The overall success rate of HRD testing was 69.6%.

Chances of obtaining a result from diagnostic biopsy was 66.7% (n=40/60), at primary surgery was 91.5% (n=42/47) and at interval debulking surgery was 51.2% (n=21/41). There is a statistically significant difference in the success rates of tests performed on diagnostic biopsies dependent on needle gauge: 100% success associated with 16-gauge (n=14/14) compared with 64.5% for 18-gauge (n=20/31) and 40% (n=6/15) for unclear gauge.

Out of 148 tests, 27% returned results in ≤ 21 days (median 28 days, range 14-158 days). 84.6% of patients with HRD-positive tumour treated at Imperial College Healthcare Trust received PARP-inhibitors as part of their first-line maintenance treatment.

Conclusions

Approximately 1/4 of HRD tests returned results within 3 weeks. Test failure rates were higher after chemotherapy and if samples were taken using an 18-gauge needle. By optimising HRD testing, we can make appropriate treatment decisions at the earliest timepoint possible.

The establishment of a genomic nurse specialist role to support quality improvement in genetic testing after ovarian cancer diagnosis.

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Aims

To establish a genomic nurse specialist role for the improvement of genetic testing uptake and success rates after the diagnosis of ovarian cancer.

Background

The Demonstration of Improvement for Molecular Ovarian Cancer Testing (DEMO) is one of the national IMPROVE-UK quality improvement pilots. It aims to improve genetic testing uptake and success rates. We established a genomic nurse specialist role to support this project and summarised our experience.

Methods

A combination of on-the-job and structured training were used to support a senior nurse to gain knowledge in genetic testing and counselling over 6 months (July 2022- January 2023). This included training to obtain genetic testing consent, shadowing relevant genetic and cancer care specialists and conducting clinic consultation under direct supervision. An audit of MDT engagement with genetic testing (defined as recorded MDT discussion of genetic tests for eligible patients newly diagnosed with ovarian cancer) was completed. The data were also used to identify patients who were eligible for testing.

Results

Initial feelings of being overwhelmed and anxiety about the new role were reported, which was mitigated through training and networking. Clear objectives and their completion have provided a sense of achievement.

The presence of a genomic nurse was associated with improved MDT engagement with genetic testing. The proportion of patients discussed increased from a mean of 41% between January-June 2022 to 67% between July-December 2022 ($p=0.037$).

Conclusions

A dedicated genomic nurse specialist could support the multidisciplinary team to deliver precision care for patients with ovarian cancer.

(247 words)

P-25

Delivery of Molecular Testing for Patients with Endometrial Cancer in a Gynaecological Oncology Unit

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Aims

We aimed to determine our adherence to the BAGP/BGCS molecular testing and NICE MMR deficiency testing recommendations for endometrial cancer.

Background

Molecular classification in endometrial cancer has clinical implications for prognostication and management of patients. Ongoing multicentre trials are examining molecular profile-based management, and the ESGO-ESTRO-ESP guidelines incorporate molecular classification into risk categorisation of endometrial cancers. The April 2022 BAGP/BGCS POLE testing guidance provides recommendations for molecular testing, and MMR testing is recommended by NICE.

Methods

We collected data from electronic medical records on tumour histology, staging and management of all patients diagnosed with endometrial cancer between April and December 2022 at our unit.

Results

33 patients were diagnosed with endometrial cancer during the study period. MMR testing was performed in 94%. p53 and estrogen receptor testing was performed in 91%. POLE testing was indicated in 11 patients following endometrial biopsy, and in a further 8 patients following hysterectomy. POLE testing was undertaken in 3 patients, with the result turnaround time ranging from 33 to 70 days. Of the 9 cases with MMR mutation, 7 were sporadic, and 2 patients were referred to genetics due to the possibility of Lynch syndrome.

Conclusions

We demonstrated 91% adherence in p53 and estrogen receptor testing, and 94% adherence in MMR testing. POLE testing was indicated in over half of patients, although only performed in 3 cases, with turnaround times up to 70 days. Ongoing audit and multidisciplinary collaboration is required to improve adherence in testing and identify where pathways can be streamlined.

NF1 copy number loss in high-grade serous ovarian carcinoma

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Aims

To investigate the clinical context and consequence of NF1 CNL in HGSOc.

Background

Only a subset of current HGSOc patients benefit from existing targeted therapies. NF1 CNL presents the potential for a novel therapeutic approach. Understanding the clinical context NF1-CNL tumours occur in relative to the existing HGSOc molecular landscape is essential.

Methods

Using a retrospective, 362-patient cohort, NF1 copy number (CN) was calculated from sequencing data using the CopywriteR package. NF1 gene expression and MAPK-pathway activity score (MPAS) were quantified using gene expression data. Statistical analyses were conducted on R version 4.2.1.

Results

NF1 CNL was identified in 63 cases (17.4%). 33/63 of cases (52.38%) occurred outwith existing molecularly-characterised subgroups. NF1-CNL tumours had lower NF1 mRNA expression level than NF1--CNN tumours (p-value = 0.019) and trended towards a higher MPAS than NF1--CNN cases, but did not reach statistical significance (0.407 vs -0.091, p-value = 0.07). NF1-CNL cases presented at a similar age and stage to copy number normal (CNN) cases and had a similar response rate to first- and second-line chemotherapy by CA125-measurement. NF1-CNL cases experienced superior overall survival to NF1-CNN cases (multivariable-HR = 0.68 (95%CI =0.49-0.92)). Similarly, NF1-CNL cases trended towards experiencing superior progression-free survival relative to NF1-CNN cases, but did not reach statistical significance (multivariable-HR = 0.80 (95%CI = 0.58-1.1)).

Conclusions

Clinically, NF1-CNL patients present similarly to NF1-CNN tumours but experience superior overall survival.

Exploring the transcriptional profile of endometrial cancer cells with androgen receptor ectopic expression.

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Introduction

Endometrial cancer (EC) is the 4th most common cancer in women in the UK. While the roles of oestrogen and progesterone in EC have been extensively studied, the role of androgen remains under-investigated. We aim to establish an androgen receptor (AR) overexpressing EC cell line and investigate downstream effects of AR overexpression on the biology of EC cells.

Methods

We transduced Ishikawa EC cell line with a Doxycycline-inducible ectopic AR gene through lentivirus transduction followed by Puromycin selection and validation experiments to confirm the ectopic AR expression. Cells were treated in 4 conditions: A) Negative control, B) 1nM of synthetic androgen (R1881), C) 0.5ug/ml Doxycycline (to induce ectopic AR expression), D) combined Doxycycline and R1881. The in vitro effects of these treatments were investigated and RNA-seq analysis is currently underway to further investigate the impact on the EC cells' transcriptional profile.

Results

Immunofluorescence of the transduced cells confirmed the Doxycycline-induced ectopic AR expression. Exposure to R1881 showed an expected stabilisation and nuclear localisation of the AR signal. qPCR results showed a statistically significant 10-fold increase in AR transcripts in the transduced cells following Doxycycline-induced activation of AR expression compared to controls. RNA-sequencing results are still pending.

Conclusion

We successfully established an AR-overexpressing EC cell line which will serve as a valuable resource in investigating the role of AR in EC. We expect the RNA-seq results to shed more light on the AR signalling in EC.

Comprehensive genomic characterisation of synchronous endometrial and ovarian carcinoma (SynEOC)

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Aims

To identify the genomic relatedness of SynEOC

Background

SynEOCs pose a management challenge. There is uncertainty whether these cases reflect independent primary tumours or metastases from a shared primary.

Methods

We performed comprehensive histopathology and matched whole exome sequencing (WES) on 28 archival paired non-serous SynEOC samples isolated from the endometrium and ovary. Genomic data was analysed to identify relatedness between pairs.

Results

Combined scoring across multiple genomic assessments stratified the paired samples into 3 groups: genomically “close”, “intermediate” and “distant”. Despite variance, all tumour samples shared common underlying mutational signatures and at least 5 or more pathogenic categorised mutations. The vast majority (22/28 cases; 79%) shared a conserved mutation over at least one of the major driver genes identified in non-serous tumours (ARID1A, CTNNB1, KDTM2D, PIK3CA & PTEN). CTNNB1 mutations were enriched and RAS pathway mutations depleted within the genomically “close” group. Genomically “close” samples displayed no loss of mismatch repair proteins, no micro-satellite instability, no detectable POLE gene mutation and lower mutational burden. We note an enrichment in cases displaying endometriosis specifically in the genomically close group (8/10).

Conclusions

Overall, the present work provides evidence that SynEOCs are genomically related tumours, which in many cases exhibit an accumulation of distinct genomic events at their individual sites.

VTE during neo-adjuvant chemotherapy for advanced ovarian cancer significantly delays interval cytoreductive surgery. Data from a large UK cancer centre

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Aims

Evaluate incidence of newly-diagnosed venous thrombo-embolism (VTE) in patients undergoing neo-adjuvant chemotherapy (NACT) for advanced ovarian cancer (AOC) and impact on time from biopsy to date of cytoreductive surgery.

Background

Malignancy, surgery and chemotherapy represent risk-factors for VTE. Despite diligent use of thromboprophylaxis following cytoreductive surgery – patients receiving, in accordance with NICE, 28 days of post-operative Enoxaparin; as yet, no such guidance exists recognising the cumulative thrombotic risk incurred by AOC patients embarking on the NACT-pathway. VTE during chemotherapy may delay, or contra-indicate, surgery; and has been associated with reduction in survival.

Methods

We identified all patients with stage IIIC/IV AOC undergoing NACT in a UK cancer centre between 2010-2021. Electronic records, radiology reports and MDT outcomes were used to collate patient demographics, VTE risk profiles and identify those developing DVT/PE whilst receiving NACT.

Results

N=170. Median age 64.7years. 26 cases (15.3%) of VTE diagnosed. 5 (2.9%) prompted initial presentation; 7 (4.1%) identified on index imaging. 14 (8.2%) patients developed VTE during NACT – of these: 7 (50%) DVT and 7 (50%) PE; 1 (7%) had BMI >30kg/m²; no patients were smokers; and none had prior history of thrombosis. Mean 'biopsy to surgery' time, comparing 'VTE at cancer diagnosis' to 'VTE during NACT' was 25v33 weeks (p=0.04).

Conclusions

We present a VTE risk of 8.2% during NACT for AOC; and suggest developing VTE whilst on chemotherapy may significantly delay proceeding to surgery. We support the need for multi-centre multi-variate analysis to inform development of risk-reduction thromboprophylaxis guidance for this cohort.

P-31 and BGCS Short

Rucaparib efficacy, tolerability and role in maintaining platinum sensitivity in recurrent high grade serous carcinoma of ovarian, tubal or primary peritoneal origin.

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Aims

To review our experience of the use of rucaparib and its effect in maintaining platinum sensitivity in a cohort of our patients with recurrent high grade serous carcinoma of ovarian, tubal or primary peritoneal origin.

Background

The poly (ADP-ribose) polymerase inhibitor rucaparib is approved as maintenance monotherapy following response to platinum based regimen in relapsing epithelial ovarian cancer patients.

Methods

That was a retrospective review of the electronic records of 28 female patients with recurrent high grade serous carcinoma of ovarian/tubal/primary peritoneal origin, treated with rucaparib 600mg twice daily between November 2019 and May 22.

Results

Median age was 74 years (range 50-83 years). Their initial presentation stages were stage III and IV (61%).

Most of our patients had 2 lines of SACT prior to rucaparib (89.3%) with 42.9% had bevacizumab regimen. Partial responses were achieved in 96.4% of patients prior to starting rucaparib and 67.9% had debulking surgery at initial presentation.

Rucaparib was generally well tolerated and discontinued in only 4 patients due to toxicities.

Occasional grade 3/4 toxicities were encountered in 60% of the patients requiring dose reductions.

Anaemia or fatigue were the most common grade 3 or 4 toxicities (29.4% each).

The median progression free survival -while on rucaparib- was 5 months (range 2.37-7.63). The more lines of prior SACT, the shorter the median rucaparib PFS (7 month two lines; 4 months with 3 lines and 3 months with 4 lines). Median PFS was higher in patients who were treated initially with bevacizumab compared to non-bevacizumab regimen (7 and 5 months respectively) and/or BRCA mutation versus no mutation (7 and 5 months respectively). Nearly, 60% of our patients had maintained platinum sensitivity after progression following treatment with rucaparib.

The median overall survival (OS) was 21 months (range 11-30 months). One year OS probability was 76% and 2 years probability was 35%.

Conclusions

Rucaparib was well tolerated although dose reduction was needed to manage grade 3 or 4 toxicities in some of our patients. Platinum sensitivity was maintained in most of the patients as well as reasonable progression free survival. Higher efficacy was achieved with earlier introduction of rucaparib as well as with previous bevacizumab treatment.

ARTISTRY-7: phase 3 multicenter study of nemvaleukin alfa plus pembrolizumab versus chemotherapy in patients with platinum-resistant epithelial ovarian, fallopian tube, or primary peritoneal cancer

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Aims

ARTISTRY-7 is evaluating the novel engineered cytokine nemvaleukin alfa (nemvaleukin, ALKS 4230) in patients with gynecological cancers.

Background

Nemvaleukin was designed to selectively bind to the intermediate-affinity interleukin-2 receptor, preferentially activating antitumor CD8⁺ T and NK cells, with minimal regulatory T cell expansion. This selectivity may provide enhanced tumor killing and improved safety/tolerability versus high-dose interleukin-2. In ARTISTRY-1, 4 responses (2 complete, 2 partial) were observed with nemvaleukin+pembrolizumab in patients with platinum-resistant ovarian cancer.

Methods

ARTISTRY-7 (NCT05092360) is a currently enrolling phase 3, multicenter, randomized study of nemvaleukin and/or pembrolizumab versus chemotherapy. Eligible patients have histologically confirmed epithelial ovarian (high-grade serous, endometrioid, clear cell), fallopian tube, or primary peritoneal cancer. Patients must have had ≥1 prior line of systemic therapy (platinum-sensitive setting), ≤5 prior lines (platinum-resistant setting), and prior bevacizumab, with radiographic progression on most recent therapy. Patients with primary platinum-refractory disease (progression on first-line platinum therapy) or primary platinum resistance (progression <3 months after first-line platinum therapy completion) are excluded.

Approximately 376 patients will be randomized (3:1:1:3) to receive nemvaleukin 6 µg/kg intravenously (days 1-5) + pembrolizumab 200 mg intravenously (day 1) in 21-day cycles, pembrolizumab or nemvaleukin monotherapy, or chemotherapy. Primary endpoint is investigator-assessed progression-free survival (RECIST v1.1) in nemvaleukin+pembrolizumab versus chemotherapy arms. Secondary/exploratory endpoints include overall survival, other antitumor measures, safety, health-related quality of life, and pharmacokinetic/pharmacodynamic effects.

Results

Trial in progress: there are no available results at the time of submission.

Conclusions

Trial in progress: there are no available conclusions at the time of submission.

PATRON Study: Real World Patient and Specialist Evaluation into the Diagnostic Pathways and Treatment Patterns in Advanced Epithelial Ovarian Cancer

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Background

Use of first-line maintenance (1LMT) is becoming more widespread in aEOC.

Aim

To provide an understanding of real-world perceptions regarding current diagnostic pathways and treatment patterns in aEOC and help identify areas for improvement.

Methods

Cross-sectional online surveys amongst HCPs currently treating aEOC patients and adult patients in the UK with stage 3/4 EOC who had completed first-line (1L) chemotherapy and self-reported they were eligible for 1LMT. Data was collected between April-October 2022.

Results

142 patients and 101 HCPs (medical/clinical oncologists(n=44), gynae-oncologists(n=26) and clinical nurse specialists(n=30)) were surveyed. Mean patient age at aEOC diagnosis was 48.8 years. Median time from first primary care consultation to diagnosis was 5.5 weeks. HCPs reported 88% of patients who were eligible accepted surgery, of those, 55% reportedly achieved R0 resection. 56% of patients reported receiving active 1LMT and 44% reported active surveillance only (AS). Of patients who received AS(n=62), 68% reported their HCP advised them it was their most suitable treatment option; 23% reported they were given no other treatment options. 79% of patients reported they were offered germline biomarker testing, of which, 92% accepted. 97% of HCPs reported medical oncologists broach biomarker testing with patients.

Conclusions

This UK survey highlighted that despite reporting they were eligible for 1LMT, 2/3rds of patients receiving AS were told it was their most suitable option. Further work exploring the reasons for this is needed. One fifth of surveyed patients reported they did not receive germline biomarker testing; acceptance was high amongst those recommended to be tested.

miRNA Targetome Associated with Early Relapse in High-Grade Serous Ovarian Cancer

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Aims

In this study, we aimed to reveal the miRNA-targetome related to early relapse in high-grade serous ovarian cancer (HGSOC).

Background

HGSOC is the deadliest malignancy among ovarian cancers due to the high rate of early relapse. miRNAs have key roles in regulating the expression of most ovarian cancer-related genes. The investigation of key miRNA-regulated genes may reveal new drug targets to prevent early relapse in HGSOC.

Methods

Four GEO datasets were analyzed with an integrated bioinformatics approach to identify the miRNA-targetome associated with early relapse in HGSOC. Gene set enrichment analysis of the miRNA-target genes was conducted with the Database for Annotation, Visualization, and Integrated Discovery, DAVID. Kaplan-Meier curves of the targeted genes were plotted to investigate the relation between the target genes and the survival of HGSOC patients. The main interactor hubs of these genes were identified on the STRING database, Cytoscape and inBio DiscoverTM.

Results

We identified 12 differentially expressed miRNAs in early relapse patients. Fifteen miRNA-target genes were common to early relapse patients in all datasets. Common miRNA-target genes were enriched in the ontology “transcription from RNA polymerase II promoter”. Kaplan-Meier survival analysis and network analysis revealed CWC27, DCUN1D1, MEF2C, and SPOPL as genes associated with poor prognosis and early relapse. The main interactor hubs of these genes were involved in the synthesis or cleavage of other gene products.

Conclusions

Further studies on targeting the four miRNA-target genes may demonstrate their potential as drug targets to improve prognosis and prevent early relapse in HGSOC.

Local review on use of gemcitabine and carboplatin on advanced endometrial cancer at Imperial

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Aims

We performed a retrospective review to determine the response rate and PFS of women with advanced endometrial cancer, treated with gemcitabine and carboplatin at Imperial College Healthcare NHS Trust.

Background

There is no standard of care for second or later lines of chemotherapy treatment for advanced endometrial cancer.

Methods

Eligible patients had histologically confirmed advanced (stage IV) or recurrent endometrial cancer who started treatment with gemcitabine and carboplatin between January 2019 and May 2022. Patients were followed up to February 2023. Response rate to treatment was determined by radiological findings.

Results

15 eligible patients were identified. Median age was 67.1 years (range 50.3-72.9). The predominant histology was serous (66.7%, n= 10), followed by endometrioid (13.3%, n=2), carcinosarcoma (13.3%, n=1), mixed histology (6.7%, n=1) and poorly differentiated (6.7%, n=1). 14 patients had previous surgical management. All patients had previously received at least one previous platinum-based regimen. Median number of prior chemotherapy lines was 2 (range 1-4). The overall radiological response rate (ORR) was 27.8% (n=5) with one patient having a complete radiological response. Two patients either declined response assessment or were too unwell to have scans. Six further patients had stable disease on imaging. The median PFS was 7.5 months and median OS was not reached.

Conclusion

In a mixed population of patients with previously treated advanced endometrial cancer, gemcitabine and carboplatin showed activity and had one patient achieving a complete response.

Characterising the clinical behaviour of ovarian carcinosarcoma

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Aims

To enhance our understanding of ovarian carcinosarcoma (OCS) as a clinical entity, further defining clinical behaviour and characteristics at patient diagnosis.

Background

OCS is a rare and highly aggressive form of ovarian cancer. OCS has received little research attention and our understanding of the disease as a clinical entity is limited.

Methods

Using the Surveillance, Epidemiology and End Results (SEER) public database, clinical features of carcinosarcoma cases were compared to the other major ovarian cancer histotypes. Statistical analysis was performed to calculate estimated Kaplan-Meier survival curves and cause-specific survival rates. Cox proportional hazard regression models were used, adjusting for age at diagnosis, race/ethnicity, disease stage and debulking status.

Results

Multivariable analysis demonstrated that OCS patients have the poorest survival outcomes of the major ovarian cancer types, followed by mucinous (HR: 0.72 versus OCS) and clear cell (HR: 0.67). OCS demonstrated a median survival time of 16 months. In the context of distant stage at diagnosis, mucinous cases had the worst survival (HR: 1.35 versus OCS), while clear cell cases were not statistically significantly different (HR: 0.96, P= 0.5049). Achieving complete resection following surgery improved survival compared to macroscopic residual disease (HR: 0.44). Late stage disease was associated with markedly increased risk in OCS (HR: 3.73).

Conclusions

OCS has poor survival outcomes and the shortest survival time compared to other ovarian cancer types. Poor prognostic factors for OCS include late stage at diagnosis and presence of residual disease after resection.

Venous thromboembolism during neo-adjuvant chemotherapy for ovarian cancer: a national audit

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Venous thromboembolism during neo-adjuvant chemotherapy for ovarian cancer: a national audit

Aims

1) To identify the rate of venous thromboembolism (VTE) in patients receiving neo-adjuvant chemotherapy (NACT) for advanced epithelial tubo-ovarian/peritoneal cancer (OC), across UK cancer centres, 2) To understand the impact of VTE on patients and cancer treatment.

Background

Several case series and the recent BGCS survey have shown that patients receiving NACT for OC are potentially at high risk from major VTE. There is a need to understand rates across the country, prior to considering a national protocol.

Methods

All UK cancer centres were invited to participate in this retrospective audit of patients with FIGO stage 3/4 epithelial OC with decision for NACT, over a 1-year period from 2021-2022.

Results

There are 16 participating cancer centres. As of March 2023 7 centres have returned data (359 patients). VTE occurred in 73/359 (20.3%) women awaiting diagnosis and during treatment, of which 68.5% developed pulmonary embolism (PE). 34/359 (9.5%) women developed VTE awaiting diagnosis, 6/359 (1.7%) awaiting treatment decision, 25/359 (7.0%) following decision for NACT, and 8/359 (2.2%) in the immediate post-operative period following cytoreductive surgery. 2 patients died from massive PE: 2.7% of those developing VTE (0.6% of total).

Conclusions

This national audit confirms that patients undergoing NACT for OC are at unacceptably high risk from major VTE including PE, with resulting impact on cancer treatment and morbidity. These data, which will be more robust once all participating centres submit, are important to inform a proposed working party with the British Society of Haematology in developing a joint thromboprophylaxis protocol.

Determining the survival benefit of achieving complete resection across ovarian carcinoma subtypes.

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Aims

To determine if there are differences in the magnitude of survival benefit between ovarian carcinoma subtypes when zero residual disease (RD) is achieved after first-line debulking surgery.

Background

The six main subtypes of ovarian carcinoma (high grade serous, low grade serous, carcinosarcoma, clear cell, endometrioid, and mucinous) are all treated with first-line debulking surgery; the objective of which is to achieve zero RD, which is associated with improved survival outcomes.

Methods

Outcome data for 2235 patients diagnosed between 1994 and 2019 were obtained from the Edinburgh Ovarian Cancer Database. Cox proportional hazard regression models were used to measure the impact of achieving zero RD on disease-specific survival across each of the subtypes.

Results

Multivariate analysis demonstrated that zero RD significantly reduced the risk of death across the cohort (HR = 0.37, $p = <2e-16$). When analysed by subtype, clear cell carcinoma (CCC) patients showed the greatest survival benefit when zero RD was achieved (HR = 0.22, $p = 4.42e-9$), compared to mucinous which showed the least survival benefit (HR = 0.59, $p = 0.32$). Low grade serous, carcinosarcoma, endometrioid, and high grade serous patients showed similar survival benefits with zero RD (HRs = 0.34, 0.35, 0.38, 0.40 respectively, $p = <0.05$).

Conclusions

Residual disease status following debulking surgery impacts survival outcomes to varying extents across the six analysed subtypes. CCC patients derive the greatest benefit, but achieving zero RD is important across all subtypes.

Real world outcomes of first line maintenance Niraparib in advanced high grade serous ovarian cancers - A single centre experience.

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Aims

Our primary endpoint was to collect survival outcomes (overall and progression free survival) and toxicity profile.

Background

Niraparib, an inhibitor of poly(adenosine diphosphate [ADP]–ribose) polymerase (PARP), has been approved as first line maintenance in advanced ovarian cancers post response to platinum based chemotherapy based on the encouraging survival benefits in the seminal PRIMA trial regardless of HRD status.

Methods

We analyzed our patients who were diagnosed with advanced high-grade serous ovarian cancer and treated with Niraparib from December 2020 to March 2022. Data was analyzed using SPSS version 29 (IBM, NY).

Patient Characteristics N=19

Median Age (years) 74(57-84)

ECOG PS

0

1

2

1(5.3%)

16(84.2%)

2(10.5%)

FIGO STAGE

IIIA

IIIC

IV

1(5.3%)

11(57.9%)

7(36.8%)

Received NACT

Yes

No

14(73.7%)

5(26.3%)

HRD Status

Positive

Negative

Unknown

3(15.8%)

13(68.4%)

3(15.8%)

Ca 125

>ULN

< ULN

15(78.9%)

4(21.1%)

Median no of platinum cycles(range) 6 (4-8)

Results

At a median follow-up of 14 (8-23) months, the progression free survival was 13 months (95% CI 11.65-14.35). 1-year OS and PFS was 94.1% (65-99) and 54.9% (29.5-74.5) respectively. The most common toxicities were anaemia (27%), fatigue (21%), thrombocytopenia (16%), nausea (16%), diarrhoea (11%) and neutropenia (5.3%). Dose reductions were required in 42%.

Conclusions

In our subset of predominantly elderly HRD negative patients, we have achieved similar survival outcomes and adverse effect profiles as reported in the seminal PRIMA trial.

I-BREATHE: A Respiratory Optimisation Trial. Do peri-operative interventions reduce the incidence of postoperative chest infections in Gynaecological oncology surgery?

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Background

Postoperative Pulmonary Complications(PPC) is a major cause of morbidity and prolonged hospital stay following major abdominal surgery. The incidence of PPC could be as high as 20% for upper abdominal surgeries[1], however this is not well studied amongst patients diagnosed with Gynaecology.

Methods

A single-centre retrospective study spanning the year 2019 was performed to establish a baseline incidence of chest infection and its association to post-operative length stay in patients undergoing open gynaecological oncology procedure at the Northern Gynaecological Oncology Centre(NGOC), Gateshead. A peri-operative respiratory optimisation pathway called the I-BREATHE programme was introduced in the centre in October 2021. The rate of post-operative chest infections and length of hospital stay were then assessed prospectively over a 12-month period.

Results

226 patients were included in the pre-intervention cohort(Group A) compared to 147 patients who were enrolled to the I-BREATHE programme(Group B). The most common cancer site in both cohort was tubo-ovarian. The incidence of chest infection in Group A was 15.9% whilst that in Group B was 13.6%. The introduction of a peri-operative rehabilitation pathway reduced the incidence of chest infection by 14.5% and the average hospital post-operative length of stay by 24%.

Conclusions

Our results suggest, peri-operative interventions reduce the incidence of post-operative chest infections in Gynaecology surgery.

References

Sachdev G, Napolitano LM. Postoperative pulmonary complications: pneumonia and acute respiratory failure. Surg Clin North Am 2012;92:321–44.

P-41 and BGCS Short

Pressurised Intra Peritoneal Aerosolised Chemotherapy in the management of cancers of the colon, ovary and stomach: a randomised controlled phase II trial of efficacy in peritoneal metastases (PICCOS)

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Aims

To determine if Pressurised IntraPeritoneal Aerosol Chemotherapy (PIPAC) given instead of systemic anticancer therapy (SACT) improves Peritoneal Progression Free Survival (pPFS) compared to standard SACT in patients with recurrent ovarian cancer.

Background

Ovarian cancer peritoneal recurrence can cause a series of unpleasant symptoms due to new tumour growth. Peritoneal metastases are difficult to treat with conventional SACT and there is an urgent need to develop new treatment strategies. A new strategy showing potential is PIPAC. PIPAC delivers chemotherapy into the peritoneal cavity as an aerosol during laparoscopy. PIPAC has been shown to deliver higher doses of chemotherapy directly to tumour sites compared to conventional treatment, with fewer side-effects due to less chemotherapy circulating in the blood. PIPAC has been shown to be both safe and feasible in a series of clinical trials. The question that now remains is whether PIPAC is effective or not. The National Institute for Health and Care Excellence (NICE) has recommended that PIPAC should only be offered to United Kingdom (UK) patients within a research trial.

Methods

This randomised controlled trial (RCT) will be open to patients with recurrent ovarian cancer. Patients will be randomised to receive either standard SACT or PIPAC, where three PIPAC procedures are performed.

Results

NIHR EME funding for a UK RCT has been secured and the trial is planned to open for recruitment June 2023 and all centres are encouraged to participate.

Conclusions

This trial is exploring an exciting new avenue of treatment for patients with recurrent ovarian cancer.

The oncological, economical, and environmental impact of same-day surgical cancellations at Northern Gynaecological Oncology Centre, Gateshead

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Aims

To investigate impact of same-day cancellations at NGOC.

Background

As cancer services recover from the impact of the pandemic, it is of paramount importance to avoid same-day cancellations. This not only confers individual impact with delayed oncological diagnosis/treatment, but wastes hospital resources (beds, staffing, equipment, theatre time) and has an environmental impact (CO₂ emissions). Due to the last minute nature of same-day cancellation, theatre capacity cannot be re-assigned to other patients.

Methods

Same-day surgical cancellations from February 2022-2023 were identified at NGOC. Medical records were reviewed establishing reasons for cancellation, theatre time lost, and CO₂ emissions from patient journeys. Oncological impact of rescheduling(target dates, progression, death) were reviewed.

Results

18 surgeries were cancelled. 57.5 hours of theatre time were lost, equating to 14 theatre sessions, costing £95,166. Clinical reasons for cancellations included patients unfit on the day(n=7,39%) and pre-assessment guidance not followed(n=3,17%). Non-clinical reasons included insufficient theatre time(n=5,28%) , and no HDU availability(n=3,17%).

16 surgeries were rescheduled, majority being rescheduled 14 days later, mean of 11 days(range 2-28 days). Of the 2 not rescheduled, one died the next day from bowel perforation, and one had disease progression and was deemed unfit for surgical treatment. Total distance travelled by patients was 1323.6km with total CO₂ emissions of 158.4kg.

Conclusions

56% of on-the-day cancellations were due to suboptimal pre-habilitation. Cancellation impacts oncological outcome, use of hospital resources and significantly contributes to environmental air pollution. Organisations should take steps to prevent same-day cancellations. Pre-assessment review/contact by surgical team may help address this.

Impact of Multiple COVID-19 Waves on Gynaecological Cancer Services in the UK

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Aims

To assess the impact of multiple COVID-19 waves on UK gynaecological cancer services.

Background

The COVID-19 pandemic affected multiple aspects of gynaecological cancer services. Understanding the effects of COVID-19 may help address long-term impacts and prepare services for future pandemics.

Methods

An online survey was distributed to all UK BGCS members during the three COVID-19 waves from 2020 to 2022, covering changes to staffing levels, multidisciplinary team (MDT) referrals and functioning, service capacity and delivery, and hospital COVID-19 protocols.

Results

51 hospitals (32 cancer centres) responded to Survey 1, 42 hospitals (29 centres) to Survey 2, and 39 hospitals (30 centres) to Survey 3. During the first wave, urgent referrals fell by 50%. 49% hospitals reported reduced staffing, mostly in trainee doctors (median 40%). Theatre capacity was reduced by 40%. 30% of operations were postponed. MDT meetings were completely virtual in 39% and mixed in 65%. 75% of outpatient consultations were remote. By the second wave, fewer hospitals reported staffing reductions, with a return to pre-pandemic urgent referrals and MDT workloads. Theatre capacity was reduced by 10% with 5% of operations postponed. The third wave showed similar staffing reductions to Wave 1, primarily from sickness. Pre-pandemic levels of urgent referrals/workload continued, with little reduction in surgical capacity.

Conclusions

COVID-19 led to substantial disruption of gynaecological cancer care across the UK, including reduced staffing, urgent referrals, theatre capacity, and working practice changes. Whilst disruption eased and referrals/workloads returned to normal, significant staff shortages remained in 2022, highlighting persistent capacity constraints.

A retrospective study of the impact of COVID-19 pandemic in gynaecological cancer diagnosis and treatment in a cancer centre.

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Aims

To evaluate the impact of COVID-19 pandemic on the diagnosis of gynaecological cancers, as illustrated by the annual number of cases in our cancer centre.

Background

The COVID-19 pandemic resulted in unprecedented disruption of healthcare services that led to a reconfiguration of diagnostic and treatment pathways in healthcare systems across the globe. Gynaecological cancer services were also affected by the pandemic due to decreased capacity, staffing issues, delayed treatment and decreased access to screening services.

Methods

Retrospective data collection, on patients with gynaecological cancers from January 2017 to December 2022. Cases were identified from the local gynae oncology database.

Results

A drop of 16.25% was observed across all gynaecological cancer cases during the COVID-19 pandemic. The most substantial decline was observed in ovarian and endometrial cancer (26 and 23% respectively), followed by cervical cancer (15% decline). Post-pandemic ovarian cancer returned to pre-pandemic levels, in contrast to endometrial and cervical cancer where an increase of 19% and 18% respectively was observed.

Conclusions

Our data, in line with other relevant published studies, show that a large percentage of gynaecological cancer cases might have gone undiagnosed during the pandemic. Cervical, endometrial and ovarian cancers were mainly affected. This could be related to reduced access to diagnostic or preventive services (hysteroscopy and colposcopy clinics), as well as treatment services (reduced surgical capacity). A significant, post-covid, upward trend in the number of cases was noted, likely as a result of increased capacity and an excess of cases related to the lack of screening services, as mentioned above.

Utilisation of gynaecological-oncology surgeons and review of patient outcomes in the emergency gynaecological surgery setting. A retrospective audit over a 24 month period from a UK cancer centre

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Aims

To Evaluate the frequency of unplanned gynaecological-oncology (GO) attendance at emergency gynaecological theatre cases and to review of peri-operative patient outcomes in such cases.

Background

The RCOG Position Statement (2022) "Ensuring safe out of hours support for complex emergency obstetrics and gynaecology surgery" acknowledged that approximately 10% of all emergency gynaecological surgery is beyond the skill set of general gynaecologists. Systems to address these situations where advanced surgical techniques may be required, are poorly developed across the UK.

Methods

Retrospective review of surgical outcomes of all patients undergoing emergency midline laparotomy and/or surgical management of pelvic abscess by general gynaecology between 1/8/20-1/7/22.

Results

13 patients were identified. 7(53.8%) patients had surgery for a tubo-ovarian abscess and 6(46.2%) a midline laparotomy. 4(30.8%) cases were led by the on-call GO consultant whilst 9 cases were started by a general gynaecologist, in all of these, a GO surgeon was called to provide additional assistance. Mean Operative time was 3 (0.8-5.4) hours, mean EBL 710 (75-1500) mls, and mean LOS 6(3-15) days. One intra-operative bladder injury occurred prior to GO involvement. 1(7.7%) developed a post-operative pelvic collection, 2(15.4%) experienced wound infections, and 1(7.7%) returned to theatre.

Conclusions

Emergency gynaecology surgery can be complex and may require advanced surgical skills. Our audit highlights the demand on the GO team in undertaking such cases on an ad-hoc unplanned basis. We recommend the need to recognise such and develop a parallel rota system - enabling GO to formally support general gynaecology colleagues within a recognised capacity.

Adverse endometrial cancer characteristics and their association with adipocytokines and IGF-2

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Aims

In this study we assessed the expressions of adiponectin (ADIPOQ), leptin (LEP), interleukin-6 (IL-6), insulin-like growth factors 1 (IGF1), 2 (IGF2) and their receptors ADIPOR1, ADIPOR2, OBR, IL6R, IGF1R and IGF2R in 39 endometrial cancer samples. We correlated these levels with adverse endometrial cancer (EC) characteristics such as lympho-vascular space invasion (LVSI) and microcystic, elongated and fragmented pattern of invasion (MELF).

Background

LVSI and MELF have been linked with risk of recurrence and metastasis to lymph nodes and distant organs in EC. Adipocytokines and IGFs have also been associated with EC progression. However, the mechanisms by which these factors mediate cancer progression are still under investigation and their expressions have not been correlated with LVSI or, MELF.

Methods

Gene expressions were quantified by qRT-PCR and fold changes calculated from a common calibrator sample. Expression levels were correlated with EC characteristics using linear regression.

Results

Higher IGF2($P=0.027^*$), IL6R($P=0.03639^*$) and ADIPOR2($P=0.055$) and reduced OBR($P=0.058$) expressions were associated with the presence of LVSI. Moreover, a higher ADIPOR1($P=0.049^*$) was noted in grade 1 EC and a reduced ADIPOR1($P=0.094$) in the presence of MELF.

Conclusions

Associations were observed between the biomarkers with presence or absence of MELF and LVSI. Studying the inter-relationship between these markers and cancer characteristics could shed light on the possible mechanisms involving LVSI and MELF that could mediate EC progression and could also identify potential candidates for targeted therapy. Furthermore, evaluating the expression of these markers in cancer-positive lymph nodes could provide insight into their prospects as prognostic markers.

Prognostic value of serum biomarkers in ovarian cancer: an umbrella systematic review

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Background

Ovarian cancer is the least survivable form of gynaecological cancer: fewer than half of women are alive at 5 years. Current treatments involve surgery and/or platinum/taxane-based therapy, but these carry a significant side-effect burden. To improve treatment strategies and help make informed decisions, effective biomarkers that accurately predict treatment response and outcomes are needed.

Methods

An umbrella systematic review was performed investigating prognostic value of serum biomarkers in ovarian cancer. Medline, Embase, Cochrane CENTRAL and Scopus were searched from inception to February 2023. PRISMA guidelines were followed with a pre-defined protocol. Systematic reviews with appropriate outcome measures were included. Texts which were not systematic reviews, assessed non-serum biomarkers, or that could not be translated were excluded. Article review and data capture was performed independently by >2 authors. Bias and quality was assessed using the AMSTAR-2 tool.

Results

865 unique articles were identified with 49 included in the meta-analysis. Increased neutrophil-to-lymphocyte ratio and platelet-to-lymphocyte ratio were mostly frequently associated with a poorer oncology outcome, whereas markers of improved nutritional status and haemoglobin correlated with improved oncological outcomes.

Conclusion

These data can be used to develop predictive scores to define an individual's likelihood of treatment response and enable more personalized approaches to ovarian cancer management.

A strategy for management of referrals for PMB at UHCW- Faster diagnosis pathway

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Aims

To improve 28 day faster diagnosis targets for referrals for PMB

Background

In August 2022, a patient referred for PMB waited on average 26 days before her first gynaecology appointment. This included a transvaginal ultrasound scan (TVS) at the same time or on another date, after which they required any further investigations at another date. We were not meeting the FDS. It also meant one or two separate appointment prior to discharge back to GP or further referral for hysteroscopy. Only 10% of women with PMB will have cancer.

Methods

We introduced scan and virtual clinic management. On average we receive 30 PMB referrals a week. A PMB referral would be triaged to TVS and a virtual clinic appointment within 7 days of referral. Exclusions applied (recurrent PMB, Tamoxifen treatment, Lynch syndrome, abnormalities of vulva, vagina and cervix). Based on virtual consultation, she would then be discharged with advice to visit GP for a gynaecological examination if the TVS is normal or for hysteroscopy.

Results

Combined	August	September	October	November	December	January	February	Totals	Percentage
Patients in Virtual Clinic	45	71	76	63	51	91	33	430	
Referred for hysteroscopy	22	44	42	36	30	70	22	266	62%
Discharged	23	27	34	27	21	21	29	164	38%

Conclusions

This is an effective pathway for women with PMB. 40% referrals can be discharged without a face to face clinic appointment with normal ultrasound scans.

Appropriate Triage of Abnormal Bleeding on Hormone Replacement Therapy to a Two Week Wait Clinic

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Appropriate Triage of Abnormal Bleeding on Hormone Replacement Therapy to a Two Week Wait Clinic

Aims

To evaluate the management of patients presenting to our District General one-stop rapid access clinic with postmenopausal bleeding, with particular regard to the management of women presenting with unscheduled and abnormal bleeding on Hormone Replacement Therapy (HRT).

Background

Unscheduled bleeding on HRT has become an increasingly encountered problem in the gynaecology two week wait service. Fragmented guidance is available. A clear consensus on the management of unscheduled bleeding on HRT is lacking and a clearly accepted national guideline is not available.

Method

134 consecutive patient referrals with abnormal bleeding to a secondary care one-stop rapid access clinic were reviewed over a 3 month period. Referrals were audited against currently available national guidance regarding unscheduled bleeding on HRT.

Result

44 patients (33%) were referred with unscheduled bleeding on HRT. No malignancies were detected in 43 patients with appropriately prescribed HRT. One endometrial malignancy was detected in one patient on unopposed oestrogen HRT. Management and referral patterns were generally not consistent with available national guidance.

Conclusion

The fragmented guidance available is not being consistently followed. We propose the implementation of a national guideline and referral pathway for unscheduled bleeding on HRT. We suggest that unified guidance and definitions of abnormal bleeding patterns would decrease referrals to 2 week wait clinics and reduce patient anxiety associated with the process.

Surgical Thoracic Evaluation (STE) in Advanced Epithelial Ovarian Cancer (AEOC): A Systematic Review

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Aims

This review aimed to evaluate the outcomes & feasibility of Surgical Thoracic Evaluation (STE) in Advanced Epithelial Ovarian Cancer (AEOC). We summarized the literature on Video-Assisted Thoracoscopic Surgery (VATS) (transthoracic and transdiaphragmatic) and transabdominal techniques in evaluating and managing thoracic metastasis in AEOC.

Background

Complete resection is the primary goal of debulking surgery in AEOC. Resection extends to extra-abdominal lesions in FIGO stage IV. STE can quantify thoracic disease volume and allow abdominal cytoreduction abbreviation in unresectable thoracic disease. Also, it permits complete cytoreduction if hidden macroscopic intrathoracic disease is discovered.

Methods

Seventeen studies were identified, the oldest in 1998 and ranging to 2023. Relevant articles were identified from MEDLINE and EMBASE. Analyses that described intrathoracic cytoreduction via pleurectomy, cardio-phrenic or mediastinal lymph nodes resection were included. Case reports describing surgical techniques were excluded.

Results

The number of patients ranged between 6 and 178. Thoracic cytoreduction included cardio-phrenic lymph node (CPLN), pleural, diaphragmatic, and pulmonary nodule resection. Complete thoracic cytoreduction ranged between 52 and 91%. No mortality was directly related to STE. Seven patients experienced pneumothorax & pleural effusion and one patient experienced ventilatory intolerance. Survival benefit of thoracic cytoreduction could not be quantified.

Conclusions

Surgical Thoracic Evaluation in AEOC is feasible with minimal morbidity and offers a better understanding of disease extension with better decision-making in thoracic and intra-abdominal cytoreduction. Prospective trials are needed to evaluate the impact of STE on AEOC patients' survival.

Thorough exploration of the expression of histone lysine methyltransferases in epithelial ovarian cancer

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Aims

To clarify the expression of histone lysine methyltransferases (HKMTs) in epithelial ovarian cancer and to correlate it with normal tissue, clinical stage and prognosis

Background

Epithelial ovarian cancer is the most lethal gynaecologic malignancy, diagnosed at advanced stage. In several carcinomas the histones are widely modified by HKMTs, altering gene expression, but, in ovarian cancer, this field remains to be further investigated.

Methods

In the current study, we analyzed individual HKMTs expression data from patients with serous ovarian cancer, using web-based interactive platforms like TNMplot, Gepia2, Proteomic data commons/cProsite and Kaplan-Meier Plotter

Results

RNA-seq data agree that most H3K9 HKMTs (HSUV39H1, SUV39H2, G9A and SETDB1), EZH2 (H3K27) and NSD2 (H3K36) are upregulated in ovarian serous cystadenocarcinoma compared to normal ovarian tissues. The expression of most H3K4 HKMTs (MLL1/KMT2a, MLL4/KMT2D, SMYD1, SMYD3) is decreased in cancerous tissues, along with NSD3, ASH1, SETD2 (H3K36) and DOT1L (H3K79). SETD8 and SUV420H1 (H4K20) KMTs were significantly overexpressed in metastases compared to primaries. According to cProsite, expression of EHMT2/G9a(H3K9) protein is elevated, whereas, expression of KMT2A, KMT2B and SETD7 (H3K4) is decreased in patients with ovarian cancer. Search in GEPIA2 showed that the expression of several KMTs is suppressed in advanced stages of the disease. Finally, according to KMplotter, the loss of H3K4, H3K36 and H3K79 KMTs is associated with ominous prognosis.

Conclusions

Our work demonstrated a diverse activity of HKMTs in high grade serous ovarian cancer, i.e. upregulation of H3K9 and downregulation of H3K4, H3K36 and H3K79 HKMTs with the latter being associated with shorter survival

P-53

Characterisation of the immunosuppressive kynurenine pathway and related tryptophan metabolic enzymes in endometrial molecular subtypes

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Aims

Application of immune checkpoint inhibitors (ICI) to restore anti-cancer T-cell function has been approved for the management of specific molecular subtypes of advanced recurrent endometrial cancer (EC). The kynurenine pathway is a putative mechanism of resistance to ICI therapy, where kynurenine and related tryptophan metabolites signal through the aryl hydrocarbon receptor (AhR) to induce tumour microenvironment (TME) immunosuppression. This study aimed to characterise the TME immune landscape across EC subtypes.

Background

Tissue microarrays of EC specimens (n=570) were profiled by immunohistochemistry (IHC) for p53 mutational status and mismatch repair deficiency (MMRd). Markers of cytotoxic T-cells (CD8+), regulatory T-cells (FOXP3+), macrophages (CD68+) and alternatively activated macrophages (CD163+), programmed cell death (PD1) and its ligand (PD-L1) were also profiled, together with enzymes associated with kynurenine metabolism/AhR activation: kynurenine, indolamine 2,3-dioxygenase-1 (IDO1), tryptophan 2,3-dioxygenase-2 (TDO2) and interleukin-4 induced-1 (IL4I1).

Methods

P53, MMR and PD1/PD-L1 expression was scored manually, while that of the remainder was measured in tumour and stromal compartments using QuPath. Statistical analysis included Mann-Whitney U-tests, Chi-squared tests and Cox regression.

Results

CD8+ tumour infiltrates, PD-L1 and tumour IDO1 expression was associated with improved overall survival (P<0.05, P<0.01, P<0.05, respectively). CD8+ infiltrate, PD1 and PD-L1 expression were associated with MMRd tumours (P<0.01, P<0.05, P<0.01, respectively). By contrast, increased stromal IDO1 (P<0.05), IL4I1 (P<0.01), TDO2 (P<0.001) and stromal macrophage CD163 (P<0.01) expression was observed in p53 mutated tumours.

Conclusions

These results highlight differences in the metabolic immunosuppressive TME between EC subtypes and identify AhR-mediated immunosuppression as a potential therapeutic target, particularly in p53 mutated ECs.

P-55

VIN treatment outcomes at a UK centre over the last 15 years

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Aims

To investigate patterns of recurrence and associated risk factors following primary treatment of VIN.

Background

Vulval intraepithelial neoplasia (VIN) is a premalignant lesion. The incidence of VIN is increasing and is estimated to be 3.8 per 100,000 women-years. This 15-year retrospective institutional study of treated VIN informs on recurrence rates, risk factors for recurrence following various treatment modalities.

Methods

Retrospective study of primary treatment and outcomes for VIN at CUH from 2008 to 2022. A total of 88 patients from the pathology database and 20 patients from the vulval clinic were grouped according to initial treatment modality.

Results

The median age of the cohort was 51 (CI 50.2 – 55.0) years. Median follow-up time was 45 (CI 40 – 57) months. 4 groups were studied: Local excision with clear margins – n=26 with 5 recurrences at median 52 months - Multifocal disease (MFD) rate 19%, Local excision with positive margins – n=44 with 24 recurrences at median 23 months - MFD rate 50%, Laser – n=25 with 17 recurrences at median 26 months - MFD rate 64%, and Medical – n=13 with 7 recurrences at median 17 months - MFD rate 46%.

Conclusions

Local excision achieving clear margins is associated with significantly lower risk of recurrence ($p=0.003$). Where margins are positive relapse rates are higher and occur earlier after initial treatment (50% vs 19%; $p=0.004$). MFD is a risk factor for early recurrence ($p=0.018$). These patients are at high risk of recurrence and may require multimodal treatments and more intense follow up.

Management of borderline ovarian tumours: a review of the literature and implications on follow-up

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Aims

Review of recent literature on managing BOTs. Focus on controversial areas including: Need for re-staging, completion surgery (in cases where fertility preserving surgery [FPS] was performed) and optimal follow up for these patients.

Background

BOTs have been diagnosed and discussed in literature since the 1970's. However, this remains an area of controversy especially how best to manage these patients. Patients with BOTs are usually young in their fertility years and a lot of attention has gone into FPS for these patients and the risk of recurrence. Also, many of these patients are diagnosed post-operatively after the final histology. These tumours do not respond to adjuvant treatments and can recur after prolonged periods of time so could require prolonged follow-up.

Methods

Literature search: PubMed, ELSEVIER, NIH, Cochrane, Oxford Academy, Up-To-Date, Medline, Embase.

Guideline review: BGCS, ESGO, CNGOF

Research review: AGO-ROBOT study.

Results

A consensus regarding risk factors for recurrence included higher stage of disease, FPS, incomplete staging at diagnosis/treatment, incomplete cyto-reduction and presence of implants .

There was an agreement on when recurrences occurred there was no impact on the overall survival. Recurrences are usually symptomatic, commonly of Borderline histology (risk of invasive recurrence 1-2%) and are curable via surgery.

Outdated research on BOTs with no up-to-date data.

Conclusions

Further research is needed to get better evidence to optimally Follow-up these patients and consideration of a new multi-centre study or centralised reporting system.

Patient Initiated Follow-up for Gynaecological Cancers - review of patient engagement and contacts during PIFU

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Aims

- To report the proportion of patients engaged with patient initiated follow up (PIFU) within Newcastle Hospitals NHS Trust.
- To consider the role of enhanced survivorship for this cohort.

Background

The incidence of gynaecological cancer in Northern England has increased in recent years. NHS services are overwhelmed with demand for specialist care, and there is limited evidence to suggest the traditional model of intensive follow-up after treatment improves survival.

PIFU provides opportunity to empower patients with supportive self-management, and to reduce routine hospital appointments. Low risk patients who have completed primary treatment for a gynaecological malignancy and can reliably report symptoms may be appropriate for PIFU.

Methods

The trust prospective database of patients within PIFU was reviewed and frequency of patient contact recorded.

Results

Between 2017 and 2022 686 patients were diagnosed with low-risk gynaecological cancers locally. 169 (24.6%) patients in this cohort were transferred onto a PIFU pathway. All patients had either low-risk endometrial cancer or a borderline tumour and were treated with standard surgical management. Median time from surgery onto PIFU pathway was 7.5 months (0.3 – 65.7). Mean number of patient contacts during PIFU was 0.3 (0-6).

Conclusions

Our data suggests appropriate patient selection for PIFU and a significantly reduced number of contacts during PIFU when compared with the traditional model. This offers significant financial and patient cost savings. Automated electronic processes could be introduced to hospital systems for ongoing implementation.

P-59 and BGCS Short

A UK multi-centre ovarian cancer dataset generates a predictive model with sufficient power to guide clinical management

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Aims

To demonstrate that detailed clinical datasets can be used to predict treatment dependent survival in ovarian cancer patients.

Background

The geographical heterogeneity seen in treatment patterns for patients with advanced ovarian cancer is profound, long standing, and worrying. A tool that could demonstrate the impact of a patient's treatment on their predicted survival is needed to counsel patients about their treatment options.

Methods

Data were collected using a data dictionary for all confirmed or suspected cases of ovarian cancer presenting to six cancer centres in England between 1/1/2018 and 31/12/2019.

Firstly we externally validated a previously published model (Rutten et al, DOI: 10.1016/j.ygyno.2014.07.099). Then the variables in this model were used to build a new Cox model, with expansion to consider non-linear relationships. Missing data were handled via imputation, variables were chosen with backwards selection, and all analyses were conducted in R studio.

Results

991 patient records were appropriate for survival analysis. Externally validating the Rutten model produced a Harrell's C of 0.71 (CI 0.67-0.75). Ten variables were considered for inclusion in the new Cox model, and following backwards selection, age, histology, stage, CA125, albumin and treatment were included in the final model. Harrell's C statistic for this model was 0.80 (CI 0.78-0.83).

Conclusion

Our new model has excellent predictive power and performs better than previously published models. If validated in national datasets, it will have sufficient power to guide clinical management.

PRECISE: Predicting Response in women with Endometrial Cancer or hyperplasia treated with the Intrauterine SystEm.

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Aims

This pilot study aims to identify and investigate potential predictive biomarkers of resistance to guide LNG-IUS treatment of early-stage EC and AEH.

Background

Endometrial Cancer (EC) is the most common gynecologic malignancy globally. The Levonorgestrel Intrauterine System (LNG-IUS) is an alternative treatment for atypical hyperplasia (AEH) and early-stage EC for women who are unable to undergo surgery. Thirty to 50% of women do not respond to this treatment, making prediction of Levonorgestrel (LNG) resistance a critical obstacle to overcome.

Methods

Differentially expressed genes (DEGs) and HUB proteins were previously identified in two LNG resistant and matched sensitive EC cell lines using whole transcriptome sequencing. Extracellular Vesicles (EVs) were isolated from LNG resistant and sensitive EC cell lines conditioned culture media (CCM) using size exclusion chromatography. RNA was extracted from CCM EVs, libraries were prepared, small RNA sequencing was carried out and differentially abundant miRNAs were identified. Participants (n=18) with early-stage EC or AEH treated with the LNG-IUS were recruited to PRECISE and plasma samples were obtained. Candidate miRNA and protein markers were analysed in plasma EVs via Western Blot and RT-qPCR. ALDH1A1, MAOA and KLF4 protein markers were further analysed in patient serum samples via ELISA. Immunohistochemistry was carried out on tumor microarrays of fixed pipelle biopsy samples from PRECISE participants.

Results

The mean concentration and size of plasma EVs was 3.299 particles/mL and 181 ± 17 nm, respectively. miRNA miR-363p was significantly upregulated in LNG-IUS non-responders compared to LNG-IUS responders (p=0.007). Previously identified proteins, ALDH1A1, MAOA and KLF4 were not present in plasma EVs. ALDH1A1, MOA and KLF4 were identified in serum and tissue samples.

Conclusions

This pilot study investigated potential novel markers of resistance to the LNG-IUS in patient plasma, serum and tissue samples. This research is an important primary step in translating basic science to a new, non-invasive clinically relevant test that could predetermine response to the LNG-IUS.

P-61

CXCL9 as a potential IHC marker of POLEmut endometrial cancer

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Aims

To identify a IHC marker of the POLEmut molecular subtype of endometrial cancer in order to increase feasibility of molecular testing.

Background

Endometrial cancer is the most common gynaecological cancer in Aotearoa New Zealand, and incidence rates are rapidly rising particularly in young Māori and Pasifika women. Whilst the PORTEC-3 trial identified that the 4 molecular subtypes of endometrial cancer require different adjuvant treatment regimes, these practices are not yet implement in MDT decision making in Wellington, NZ. Barriers to molecular subtyping include capacity and cost for POLE DNA sequencing. Therefore, there is a need for a surrogate IHC marker of POLEmut endometrial cancer in order to quickly and easily subtype patients.

Methods

Publically available TCGA data of endometrioid endometrial cancer was pulled from c-bioportal. 25 POLEmut and 25 non-specific molecular subtype (NSMP) tumours with RNA-seq data were chosen. Differentially expressed genes were identified between the two groups. IHC on a small cohort (14) of patient samples with known POLE mutations (n=7) was used to validate bioinformatics analysis.

Results

In total there were 4047 significantly differentially expressed genes in POLEmut vs NSMP, with 1088 of those having a fold change ± 2 . The top 10 protein coding genes with highest P values were chosen for Kaplan meier survival analysis. CEACAM21, LAG3 and CXCL9 gave the lowest hazard ratios in association with overall survival. CXCL9 and LAG3 antibody optimisation and validation was performed. LAG3 IHC resulted in very weak staining across all samples. CXCL9 staining was present in 6 of the 14 samples and correctly identified 5/6 POLE mutated tumours.

Conclusions

CXCL9 may be a potential surrogate marker for POLE mutations. Using IHC instead of DNA sequencing would significantly decrease cost and time to results, and would be accessible in all tertiary hospitals across NZ. Further large scale and/or prospective trials using CXCL9 need to be assessed, including the use of CXCL9 to identify tumours with POLE mutation variants of uncertain but highly likely pathological significance.

Factors associated with successful mainstreamed germline genetic testing in a diverse population

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Aims

To identify factors associated with successful mainstreamed germline testing in West Midlands of the United Kingdom.

Background

The Demonstration of Improvement for Molecular Ovarian Cancer Testing (DEMO) is one of the national IMPROVE-UK quality improvement pilots. It aims to improve genetic testing uptake and success rates in a diverse population. The Pan-Birmingham Gynaecological Cancer Center has a catchment population of 2.1 millions in the country's first "majority minority" city.

Methods

Cancer Outcomes and Services Dataset (COSD) between 2016-2021 (mainstreamed testing started in 2016) were linked with tumour board summaries, results at the regional genomics laboratory and patient administration systems. Patients with ovarian cancer were identified by ICD codes. Patients with ineligible histology, died within 60 days of diagnosis and out-of-region referrals were excluded.

Results

Of the 3142 patients, 787 had relevant ICD codes. After exclusions, data from 546 patients were analysed. One in 7 patients (84/546; 15%) were non-white. They were younger (median 61 years versus 66 years; $p=0.0001$) and more deprived (50% in the poorest decile versus 25% overall; $p<0.0001$). Patients with no documented ethnicity were less likely to be tested (78/143; 55% versus 66% overall; $p=0.002$). Patients who were non-white were more likely to have a germline pathological variant identified (13/84; 21% versus 45/546; 13% overall, $p=0.033$). A significant difference ($p<0.0001$) in test rates between different hospitals, up to 2-fold overall (41% versus 83%), was observed.

Conclusions

Variation in practice was a key factor for successful testing. One in 5 non-white patients with ovarian cancer tested had germline pathological variants.

P-63 and BGCS Short

Investigating new treatment approaches for low grade serous ovarian cancer (LGSOC).

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Aims

Identifying new treatment strategies through single-agent high-content screening and investigating combinations with trametinib.

Background

Low grade serous carcinoma is a rare ovarian cancer type which typically impacts younger women (<35 years) and is often identified and diagnosed at an advanced stage. LGSOC is often resistant to cytotoxic chemotherapy. Recently, the MEK inhibitor trametinib has demonstrated good efficacy in patients with recurrent LGS; however, trametinib is particularly toxic, with unpleasant side effects.

Methods

High-throughput single-agent screening of FDA-approved drug library (1,600 compounds, 1 μ M dose) was completed across 6 LGSOC cell lines using the Image Xpress platform in 384-well format. Screen 'hits' were defined as agents inhibiting cell growth by $\geq 50\%$ (by nuclei count vs untreated controls) across 4/6 cell lines. Follow-up 2D in vitro validation (IC₅₀ <1000nM) was completed using Alamar Blue assay across 9 cell lines in 96-well format.

Results

Initial single-agent sensitivity screening, hit prioritization and 2D validation identified 11 agents of potential interest. These included two proteasome and two histone deacetylase (HDAC) inhibitors, alongside the CDK inhibitor dinaciclib and the SRC inhibitor dasatinib. These 11 drugs represent candidate treatments for LGS and will be the focus of targeted synergy studies with trametinib.

Conclusions

Proteasome and HDAC inhibitors were identified as drugs of potential interest within LGSOC cell lines, alongside other compounds. Future work will explore these treatments in combinations with low dose (IC₁₀/IC₂₀) of trametinib to identify potential synergistic therapeutic approaches.

Inhibition of the Wnt/ β -Catenin pathway with DKK3 protein – a new virotherapy target for ovarian cancer?

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Aims

To develop new virotherapy for the treatment of ovarian cancer.

Background

Wnt/ β -Catenin signalling pathway plays an important role in many cellular processes, including cell proliferation. Abnormal functioning of the pathway has been demonstrated in ovarian cancer leading to poorer outcomes. We examined the effects of Wnt/ β -Catenin pathway inhibition in ovarian cancer by infecting ovarian cancer cells with modified adenovirus 5 (Ad5) expressing Dickkopf-3 (DKK3) protein, a known Wnt/ β -Catenin pathway inhibitor.

Methods

Ad5 genome was engineered to incorporate DKK3 inhibitor. Quantitative PCR test against DKK3 and Western Blot confirmed DKK3 expression in the virus. Epithelial ovarian cancer cells were infected with the modified virus at increasing ratio of virus particles per cell. The effects of the infections were assessed with cell viability assay (CTG) and a colony forming assay. Comparison was made to treatment of ovarian cell lines with commonly used chemotherapy agents.

Results

CTG assay showed reduced cell viability and proliferation of cancer cells for the first 48hrs post infection. In the colony forming assay, ovarian cancer cells were able to form multiple colonies of more than 50 cells 2 weeks after viral suppression of the Wnt/ β -Catenin pathway, indicating the inhibition may not have long standing effects on cancer cells' ability to grow and multiply.

Conclusions

Our results indicate infecting cancer cells with Ad5 expressing DKK3 successfully inhibits the Wnt/ β -Catenin pathway and leads to short-term reduction in cell proliferation.

P-65 and BGCS Short

Homologous Recombination Deficiency (HRD) testing in advanced ovarian cancer: Can we improve our testing pathway?

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Aims

To scrutinise the somatic testing pathway to determine adequacy of processing and impact of testing on cancer pathways.

Background

HR deficient epithelial ovarian, fallopian tube and peritoneal cancers (EOC) have a superior response to maintenance Olaparib, improving progression free survival. Olaparib may be beneficial in the neoadjuvant setting pending results of the NUVOLA study, demanding rapid HRD testing. The testing pathway requires adequate sampling, preparation, and analysis and should be performed in 90% of patients as per BGCS guidance. If samples are adequate, diagnostic failures should be <1%.

Methods

Patients with stage 3/4 EOC who underwent somatic testing since May 2021 were assessed to determine; (i) whether samples were sent for testing (ii) time from biopsy to result, and (iii) adequacy of biopsies for testing.

Results

70 patients were analysed with samples taken from primary debulking surgery (33%), or pre-treatment biopsy (67%). 79% had a sample sent for somatic testing; of those sent failure rate was 15%. 63% of patients, received a test result with 23 positive results. Mean turnaround time was 49 days.

Conclusions

Although intention to test is good, the rate of return requires improvement. HRD status, and therefore Olaparib suitability is unknown in 37% which may disadvantage PFS. Mean lead time is 7 weeks, delays being primarily logistical. We believe that this complex pathway can be improved to ensure that HRD status is obtained in line with BGCS standards.

FANCD2 expression as a platinum resistance mechanism in high grade serous ovarian cancer (HGSOC).

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Aims

To characterise the function and relevance of interstrand crosslink (ICL) repair protein FANCD2 in chemoresistant HGSOC.

Background

HGSOCs frequently exhibit initial sensitivity to platinum chemotherapy, but over time reoccur with increasingly platinum resistant disease, limiting the effectiveness of treatment options and contributing to the poor outcomes associated with HGSOC.

Methods

FANCD2 expression was assessed in paired cell line models taken before and after development of chemoresistance in vivo and in vitro. Analysis of FANCD2 and mTOR expression was via Western blot. FANCD2 expression was modulated in cell lines using siRNA and CRISPR/cas9 gene editing. Cytotoxicity assays were performed using the sulfurhodamine B assay. Cell migration was measured using live imaging.

Results

Increased expression of FANCD2 was observed in platinum resistant cell lines generated both in vivo and in vitro. Further investigation showed that knockdown of FANCD2 increased carboplatin sensitivity of platinum resistant PEO4 cells, but not platinum sensitive PEO1 cells. PEO4 cells were also found to express increased levels of mTOR, which is linked to FANCD2 expression in other cancers. Inhibition of mTOR led to decreased FANCD2 expression in both PEO1 and PEO4 cells. Knockout of FANCD2 in the PEO1 cell line was also associated with increased cell migration.

Conclusions

Expression of FANCD2 can be dynamically upregulated by mTOR in response to platinum chemotherapy, which may represent a mechanism of platinum resistance in HGSOC and can affect further tumour characteristics beyond ICL repair.

Development of a novel intra-operative score for the prediction of complete cytoreduction in advanced-stage ovarian cancer using Machine Learning; time to assign specific weights to the cancer ANatomic Fingerprints

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Introduction/Background

Contemporary two-dimensional anatomic scoring models, such as the Peritoneal Carcinomatosis Index (PCI) and the Intra-operative Mapping for Ovarian cancer (IMO) score fail to reflect fully the patient's real anatomy, as seen by the surgeon.

Methodology

We analyzed prospectively collected data from 508 patients with advanced epithelial ovarian cancer (EOC) who underwent cytoreductive surgery at a UK tertiary center. We adapted the structured ESGO ovarian cancer surgical report, and we employed Machine Learning (ML) to model only the variables referring to the EOC disseminated patterns for the prediction of complete cytoreduction (CC0). Receiver operating characteristic (ROC) curves were used for performance comparison; Kaplan-Meier curves, and Cox regression for survival analysis.

Results

The ANAFI score was developed based on specific weights assigned to the cancer dissemination ANatomic Fingerprints. The score ranged from 0 to 24. The ML algorithm accurately predicted CC0 (area under curve [AUC] = 0.91 CI = 0.864-0.943). Organ-specific dissemination on the small bowel mesentery, large bowel serosa, and diaphragmatic peritoneum were the most crucial global features. The new score was superior to the PCI and IMO scores for the prediction of CC0 ([AUC] = 0.81 vs 0.73 and 0.67, respectively). A 1-point increase in the new intra-operative score was associated with poorer progression-free (HR: 1.06; 95% CI: 1.03-1.09, P <0.005) and overall survival (HR: 1.04; 95% CI: 1.01-1.07) by 4% and 6%, respectively.

Conclusion

The presence of cancer dissemination in specific anatomical sites can be more predictive of CC0 and survival than the entire PCI and IMO scores.

MIRRORS ICG: Peritoneal angiography / perfusion assessment using Indocyanine green (ICG) during robotic interval cytoreductive surgery for advanced ovarian cancer.

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Aims

To determine whether intravenous ICG assists in the identification of metastatic deposits.

Background

ICG is an intravenous fluorescent dye used for cardiac, microcirculatory and tissue perfusion diagnostics. ICG binds to serum proteins and behaves as a macromolecule in the circulation. Macromolecules accumulate in tumour tissue due to increased vascular permeability and reduced drainage. Therapeutic indications include sentinel lymph node assessment and assessment of perfusion in skin flaps and bowel anastomoses. Peritoneal inflammation and cancer invasion cause neovascularisation with abnormal blood vessel patterns seen within peritoneal metastatic deposits.

Methods

Peritoneal surfaces of the abdominal and pelvic cavity were examined under white light and near infrared light (da Vinci Si & Xi Firefly Fluorescence imaging, Intuitive Surgical Inc) following intravenous injection of 20mg ICG (5mg/ml sterile water). Visibly abnormal areas were removed and sent to histopathology noting whether ICG+ve or not.

Results

102 biopsies were assessed using ICG. Intravenous ICG assessment following neo-adjuvant chemotherapy had a sensitivity of 91.25%, specificity of 13.63%, a positive predictive value of 79.35% and negative predictive value of 30%.

Conclusions

Video presentation demonstrating peritoneal perfusion using ICG dye in patients undergoing robotic interval cytoreductive surgery. ICG did not improve metastatic disease identification. ICG positive/histology negative biopsies could represent chemotherapy treated disease. The use of molecular imaging to facilitate precision surgery and enhanced identification of disease using the robotic platform is an exciting area of research.

OPTIMUS: Optimising cardiovascular health In endometrial cancer survivors

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Aims

To assess the feasibility of optimising cardiovascular risk factors in endometrial cancer survivors during routine follow-up.

Background

Despite better survival rates than other gynaecological malignancies, endometrial cancer survivors have a 16-fold higher risk of death than the general population, largely driven by excess cardiovascular deaths.

Methods

At routine appointments, medical, drug and lifestyle histories were taken. Blood pressure, body mass index (BMI), serum HbA1C and cholesterol were measured and QRISK3 score calculated. Tailored advice on weight loss and exercise was given and NICE guideline-recommended pharmacotherapy commenced in consultation with primary care.

Results

Between 02/2022-02/2023, 68 endometrial cancer survivors were assessed, with 59 (89%) having at least one modifiable cardiovascular risk factor. Overweight or obesity were documented in 84%. A new diagnosis of diabetes was made in four (6%) women, and a further 4% were found to be at risk (HbA1c ≥ 42 mmol/mol). Of 37 eligible for QRISK3 calculation, 11 (30%) scored $\geq 10\%$. To date, 48 have been followed up for 3-6 months, with 20 (42%) implementing recommended lifestyle or medication changes. Eleven (24%) self-reported weight loss. Two (50%) with hypertension commenced new anti-hypertensive therapy. Four (57%) with QRISK3 $\geq 10\%$ are trialling lifestyle modification and one has also commenced statin therapy.

Conclusions

Endometrial cancer survivors have a high prevalence of undiagnosed and undertreated cardiovascular risk factors but are receptive to making improvements. Gynae-oncologists are uniquely placed to screen for and advise on the management of suboptimal cardiovascular risk factors. Our work raises awareness of the opportunities for preventing cardiovascular disease through extending the role of Gynae-oncologists.

Cervical Cancer during Covid-19: implications for Survivorship

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Title: Cervical Cancer during Covid-19: implications for Survivorship

Aims

To explore diagnosis and stage of cervical cancer before and during the Covid-19 Pandemic at an Irish Gynaecology Oncology centre

Background

Cervical cancer screening was suspended as part of the emergency response to the Covid-19 pandemic. An audit was conducted to examine cervical cancer diagnoses and stage of disease in 2019, 2020 and 2021.

Methods

The MDT database was interrogated to establish all cases of cervical cancer discussed. Cases of recurrence and non-cervical cancer primaries were excluded. Original diagnostic and staging information were reviewed to validate the stage of disease, as per FIGO (2018).

Results

Total numbers of new cervical cancer diagnoses remained similar in 2019 (n=20) and 2020 (n=19). There was a 60% increase in new diagnoses of cervical cancer in 2021 (n=32). Stage 1 cancers decreased from 60% in 2019 to 47% of cases in 2020, when screening was suspended. Stage 2 diagnoses doubled in 2020, and reduced significantly in 2021. Stage 3 cancers doubled in 2021 to 22%, with a reduction in the number of Stage 4 cervical cancer diagnoses. Overall, those with advanced disease account for 30 – 35% of all cases diagnosed over 3 years.

Conclusions

Covid-19 Pandemic resulted in a number of changes in trends seen in cervical cancer diagnoses. Stage 1 cancers decreased, while stage 2 cancers increased which has resulted in a larger cohort of women receiving radiotherapy as primary treatment than in previous years. This has important implications for survivorship services.

PATRON Study: Real World Patient and Specialist Evaluation of the Impact of Advanced Epithelial Ovarian Cancer (aEOC) on Patients' Quality of Life (QoL)

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Background

Treatment of aEOC can impact QoL.

Aims

To provide understanding of real-world perceptions regarding QoL in aEOC and its management.

Methods

Cross-sectional online surveys amongst HCPs currently treating aEOC and adult patients in the UK with stage 3/4 EOC who had completed first-line (1L) chemotherapy and self-reported eligibility for 1L maintenance (1LMT). QoL observations assessed using Likert scales. Data collection was April-October 2022.

Results

142 patients and 101 HCPs (medical/clinical oncologists (n=44), gynae-oncologists (n=26) and clinical nurse specialists (n=31)) were surveyed. On the 5-point Likert scale, HCPs and patients gave a rating of 4/5 ("a great deal") to feeling/perceiving patients to feel anxious/nervous (Patients 72% vs HCPs 95%), anger/resentment (64% vs 79%) and frightened (64% vs 93%) due to their aEOC. Patients undergoing active surveillance (AS) (n=63) versus active 1LMT (n=79), reported experiencing "a great deal" of anger/resentment (83% vs 49%), anxiety/nervousness (81% vs 63%) and fear (77% vs 55%). All HCPs reported discussing the emotional impact of aEOC with patients at least occasionally; however, 25% of patients reported never discussing it. 2% of HCPs rated discussing the emotional impact of aEOC with patients as "very difficult" (1/2 on 7-point Likert scale), compared to 15% of patients. 55% of HCPs reported they "often/always" refer patients to a specialist to manage mental health; 46% of patients reported being referred.

Conclusions

HCPs and patients recognise the impact of aEOC on mental wellbeing, however there is a disconnect between them regarding perceived emotional impact and how this is managed and discussed. A higher proportion of patients on AS reported experiencing high levels of emotional/psychological distress, compared with patients on active 1LMT.

Indwelling Pleural Catheters in Gynaecological Malignancy

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Introduction

About one-third of those with gynaecological malignancies can develop malignant pleural effusion leading to distressing symptoms during the course of the disease. In the last two decades, Indwelling Pleural Catheters (IPCs) have emerged as an effective treatment option for recurrent pleural effusions. This audit aims to assess the potential complications and prognostic benefits of IPC insertion in gynaecological malignancy.

Methods

Patients attending the NHS Grampian pleural service between September 2019 and January 2023 were studied. Data was extracted from patients following a search on Patient Management Systems (PMS). Simple statistics were used for analysis.

Results

A total of 126 IPCs were inserted. The average age of the patients was 71-years, with 51% being female (64/126). Malignant effusion (94% (119/126)) was the commonest indication. Of these, 6% of patients (8/126) had a gynaecological malignancy as the underlying cause of their effusion, ovarian being commonest. Two (66.7%) of these patients received surgical intervention for their underlying malignancy, one pre-IPC insertion and one after. 25% (2/8) had IPC related infection but only required antibiotics for treatment. Majority (5/8) had spontaneous pleurodesis between 2-4 months prior to IPC removal. All reported symptomatic benefit from IPC insertion.

Conclusion

IPC is an effective symptom management measure in malignant pleural effusion. In the sub-cohort of gynaecological malignancy related effusion, all reported symptom relief and improved quality of life. There is limited data to assess whether IPC improves fitness to aid in surgical intervention of the malignancy. A larger multi-centre approach could help determine if IPC this.

Literature review of the use of platelet rich plasma (PRP) to treat post- radiotherapy sequelae and improve quality of life in survivorship

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Introduction

Autologous activated platelets have been proven to utilise physiological reparative processes by 'hijacking' the wound healing response. Stem cells migrate via chemoattraction and stimulate release of growth factors such as vascular endothelial growth factor (VEGF), epidermal growth factor (EGF), transforming growth factor- β resulting in vessel formation, epidermal deposition, and collagen synthesis¹.

Pelvic radiotherapy is a fundamental element of treatment in primary gynaecological malignancy. Consequently, genital damage occurs resulting in dyspareunia which has a significant impact on psychosexual health². Effects are progressive and can occur following a period of latency. Oedema, inflammation, and ulceration evolve to mucosal thinning, adhesions, atrophy, and fibrosis, which ultimately leads to vaginal shortening and stenosis^{1, 2}.

Methods

Literature search for articles between 2012 – 2022 using keywords 'PRP', 'gynaecology', 'radiotherapy'.

Results

Limited studies to date. All showed objective improvement after PRP. Morelli et al 2013 found that treatment with PRP after radical vulvectomy resulted in decreased infection, necrosis and wound breakdown³. A pilot study of PRP following pelvic radiotherapy demonstrated significant objective improvement in vaginal diameter, with reduced stenosis on histopathology, improved sexual health and increased orgasm by 86%².

Conclusion

Advancements in autologous growth factor treatments may show promise in treating the underlying mechanism of injury from radiotherapy. It increases the innate reparability of the human body and has been shown to exert a radioprotective effect without initiating recurrence of malignancy^{1,3}. A pilot study within Northern Ireland is currently under development.

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P-74 and BGCS Short

Exploring Health Professionals Viewpoint of Provision of Nutrition Advice for Women with Endometrial Cancer in New Zealand: a qualitative study.

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Aims

To explore barriers and facilitators to delivery and uptake of nutrition advice to women diagnosed with Endometrial cancer from a health professionals' viewpoint.

Background

Endometrial Cancer (EC) cases are accelerating in women under 50 years of age and are strongly associated to obesity. Women who survive early-stage EC are at significantly higher risk of cardiovascular disease compared to women in the general population. Nutrition & lifestyle advice are not routinely incorporated into the EC care pathway.

Methods

Fifteen semi-structured interviews with health professionals in New Zealand with experience of providing health care to women diagnosed with endometrial cancer were audio-recorded and transcribed. Interviews were analysed using reflexive thematic analysis.

Results

Four themes were identified. The first three exist as barriers to women receiving nutrition advice; how to navigate conversations about high weight, access to limited resourcing and health professionals feeling powerless to overcome system influences. The fourth theme identified a community approach need to facilitate a supportive environment and share knowledge.

Conclusions

This study through the lens of health professionals' highlights barriers for delivery and uptake of nutrition advice at patient, family, community and system levels. Enhancing survivorship for women after diagnosis of endometrial cancer and optimizing existing co-morbidities including high weight and cardiovascular disease, could be enabled through further understanding of how to overcome barriers and promote facilitators. Communication and partnership with women are imperative to achieving this.

Advanced Practitioner Gynae-oncology Physiotherapist - A first for Wales

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Aims

Secure and develop Advanced Practice (AP) Gynae-oncology Physiotherapist post - develop a new physiotherapy service within gynaeoncology whilst considering an advanced level of working.

Background

With the ever changing needs of the population and the need for improvement in delivery of healthcare services a key priority within the NHS is building an AP workforce, moving away from traditional silos ways of working.

The prevalence of pelvic floor dysfunction in survivors of gynaecological malignancies is high. There is an important role for physiotherapy in the management of pelvic floor dysfunction.

It is imperative that all health care professionals look beyond the initial good outcomes of survival in oncology patients and address the long-lasting physical and psychological effects of cancer treatments, including this incredibly under-served population.

Methods

Application completed to Velindre Charitable funds to secure 3 years of funding for post.

Results

In 2020 3 years of Charitable funding was secured for an AP Gynae-oncology Physiotherapist - first AP post within the Therapies Department in Velindre Cancer Centre and also thought to be the first AP Gynae-oncology Physiotherapist within the UK.

Key achievements/involvement to date:

1:1 physiotherapy assessment and management of pelvic side effects of cancer treatment.

Physiotherapy-led 'Optimisation' (Prehab) clinic

Late Effects of Pelvic Radiotherapy MDT clinic

Conclusions

Success over last 3 years has resulted in permanent funding for post to continue with future plans to implement point of care ultrasound scanning, non-medical prescribing and the development of further AP posts for other tumour sites.

Evaluating the impact in health-related quality of life and menopausal symptoms following MDT intervention.

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Aims

To improve menopause care for gynaecological cancer patients.

Background

Surgical treatment of ovarian cancer results in the abrupt induction of menopause in pre- and perimenopausal women, who account for 20% of patients. A recent national survey identified an unmet need in women with gynaecological cancer: 67% of patients wanted help with menopausal symptoms and 62% had not had this discussed with them at any timepoint during their treatment. There is a national strategy within the British Gynae Cancer Society (BGCS) and National Cancer Research Institute (NCRI) to support development of menopause services and research across the UK. Furthermore, the UK Government Women's Health Strategy has highlighted menopause and healthy ageing as one of their key priorities.

The management of menopause particularly complex in ovarian cancer. Whilst hormone replacement therapy (HRT) is recommend for most subtypes of ovarian cancer, it should be avoided in others. This leads to confusion amongst clinicians and a reluctance to prescribe due to the fear of promoting cancer recurrence. Additionally, HRT is only a small part of menopause management and there is an urgent need to adopt a holistic approach for our patients to improve quality of life and survivorship.

Methods

We are proposing an innovative technological solution to improve menopause care by developing a web based platform/app decision aid that enables clinicians to personalise menopause treatment initially for gynaecological cancer patients (target population). This will be based on guidelines by the BGCS due to be released for the use of HRT options in these patients and will be expanded to ensure a complete holistic approach.

Results

Not yet available

Conclusions

Not yet available

Accuracy of pre-operative Computed Tomography (CT) in predicting groin node metastases in clinically early-stage vulvar squamous cell carcinoma (VSCC)

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Aims

Pre-operative CT has limited use in detecting inguinal lymph node metastases prior to surgical management of early-stage VSCC.

Background

The BGCS vulvar cancer guidelines, based on international clinical trials, recommends clinical examination and imaging of the groins prior to groin node dissection to rule out pelvic lymphadenopathy/distant disease. If radiological suspicion of disease within inguinal nodes full lymphadenectomy is performed rather than sentinels. Previous studies indicate limited usefulness in pre-operative imaging in early-stage disease.

Methods

This retrospective cohort study evaluated all women treated for suspected early stage VSCC at the tertiary Northern Gynaecological Oncology Centre(NGOC), Gateshead, between July 2015-July 2022. 302 women were diagnosed with vulvar cancer. Excluded:29 non-squamous type; 51 patients depth invasion <1mm; 62 recurrent disease/advanced stage/declined groin node assessment; 14 without pre-operative imaging. Pre-operative CT was compared with histological result of inguinal lymph node excision(Sentinel/lymphadenectomy).

Results

146 patients had pre-operative CT followed by groin node assessment. 54(37.0%) had histological evidence of groin node metastasis. The sensitivity and specificity in detecting groin node metastasis was 55.6% and 83.7% respectively. PPV and NPV for inguinal nodal metastases was 66.7% and 76.2%.

Conclusions

Our study reports the largest series of women with vulva cancer correlating pre-operative CT with nodal histology. In agreement with previous studies it shows that pre-operative CT has limited usefulness in early stage VSCC. Further stratification of accuracy when nodes are enlarged/vulva tumour is large are being performed.

Management Of IOTA Inconclusive Ovarian Masses

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Aims

Evaluate pathway and management of inconclusive adnexal masses and identify areas for improvement.

Background

RCOG guidelines recommend using RMI or IOTA simple rules (IOTA-SR) for assessment of ovarian masses. IOTA-SR characterise ovarian masses by using 5 benign and 5 malignant features. A mass with both or neither is deemed as inconclusive. A literature review showed a dearth of guidance on management of inconclusive ovarian masses.

Barts Trust implemented IOTA-SR in managing ovarian masses in 2019. Face to face teaching of sonographers took place between 09/2018 – 09/2019 with refresher sessions every six months.

Methods

We manually identified ultrasound reports with words “inconclusive” or “indeterminate” between 09/2019 and 01/2021. All women with inconclusive masses were included, records were reviewed to identify the use of IOTA simple rules template and quality of reporting.

Results

We screened – reports, 142 cases were identified, and IOTA-SR were used in 43%. 81 were referred by primary care and 54 were two-week wait referrals. 73 patients had further imaging (USS in 23%, MRI in 74%, CT in 3%). 54% patients were discharged, 19% had ongoing follow up and 17% had surgery. Of the women that had surgery, 12 had benign pathology, 6 had borderline cysts and 6 had invasive cancer.

Conclusions

As less than half of the women had an IOTA-SR scan, we will continue to roll out IOTA teaching and make the ultrasound template easier to use. Management pathway to be refined, disseminated and re-audit prospectively.

The accuracy of the Ovarian-Adnexal Reporting and Data System Magnetic Resonance Imaging (O-RADS MRI) system in an UK Cancer Centre.

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Aim

To assess the concordance of the pre-operative Ovarian-Adnexal Reporting and Data System Magnetic Resonance Imaging (O-RADS MRI) scoring with the final histology in suspicious ovarian tumours.

Background

The O-RADS MRI has been developed to risk stratify adnexal lesions in average-risk women with no acute symptoms. This risk score has been validated in a large prospective multicentre trial in Europe. To date there has been no assessment of the performance of the O-RADS MRI score in an UK Cancer Centre.

Method

This is a retrospective study carried out in Watford Cancer Centre between January and September 2022. Out of a total of 57 patients operated for suspicious ovarian tumours in this period, 20 (35%) met the criteria and were included into the study.

Results

O-RADS 5 lesions were diagnosed in 7 patients, but only in 2 cases (29%) malignancy was confirmed by histology. For 50% (4 out of 8) of the O-RADS 4 lesions, malignancy was confirmed. One out of 4 (25%) O-RADS 3 patients was found to have a malignant lesion. Only one O-RADS 2 lesion was found and it was borderline.

Conclusion

In our centre, the accuracy of O-RADS 5 scoring did not perform as described in previous studies, with less than one third of the patients being accurately diagnosed preoperatively.

Cervicovaginal infections and HPV-DNA positivity in Greek females of reproductive age harbouring cervical dysplasias

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Aims

To investigate HPV-DNA positivity in relation and possible co-infection with other sexually-transmitted-pathogens of the lower genital tract (chlamydial-mycoplasma-ureaplasma infections) in women with cervical intraepithelial (CIN) lesions referred for colposcopic evaluation with biopsies, and their correlation with histological grade.

Materials & Methods

All women were evaluated cytologically (liquid-based cytology sample-LBC) and additionally with HPV DNA genotyping as well as common STIs (Ct-Mg-Mh-Up-Uu) using NAATs. All women underwent colposcopically-guided cervical biopsies; full demographic and sexual history data were also recorded.

Results

A total of 93 women have been so far included in the study with the average age of 33.2 years; only 36% had received the anti-HPV vaccine. Seventy-nine percent harboured HR-HPV while 19% of the population tested positive for LR-HPV. All individuals with cytological HSIL tested positive for HR-HPV. Of note was that 55,9% of the study population tested positive for STIs. Forty-six individuals (49.5%) tested positive for Ureaplasma spp (Up & Uu), while other pathogens (Chlamydia trachomatis, Mycoplasma hominis & HSV-1) were present in only 15 women. From the total population, in 60 women (64.5%) histology documented a low-grade lesion (CIN1) and in 30 individuals (32.3%) a high-grade lesion (CIN2+).

Conclusions

STIs represent an important public health issue, despite these infections can be either prevented or treated effectively by anti-HPV vaccination and antibiotic administration. Co-testing for STIs in the context of cervical screening is a technically feasible strategy for young individuals, which could potentially reduce the risk of long-term complications such as infertility and adverse obstetric outcomes. The results and cost-effectiveness of this pilot study warrant further investigation.

HPV molecular profile and Sexually Transmitted Infections - A prospective observational study in Greek female population

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Aims

To investigate the potential relations of HPV expression together with other sexually transmitted pathogens (STDs) and possible additional indicators that may identify increased risk for an STD during a scheduled colposcopy clinic appointment.

Material & Methods

Prospective study of 336 women examined with liquid-based cytology (LBC) and colposcopy; their cytological samples were analyzed for HPV DNA and mRNA E6&E7 molecular profile and the existence of additional STDs: (Chlamydia trachomatis, Mycoplasma genitalium & hominis, Ureaplasma spp). Detailed epidemiological demographic data were also recorded.

Results

Fifty-four percent of the population had abnormal LBC smears. Abnormal colposcopy was documented in 210 women, 152 individuals (45.2%) illustrated HPV DNA positivity and 27.4% HPV mRNA positivity. Furthermore, 40.5% were positive for STDs; in particular 30.4% Ureaplasma spp, 9.5% Mycoplasma spp and 0.6% Chlamydia trachomatis. STDs expression was positively related to the number of sexual partners ($p=0.02$), abnormal cytological results ($p=0.04$), abnormal colposcopic findings (OR:1.8,95%CI:1.2-2.9, $p=0.01$), HPV DNA positivity (OR:1.7,95%CI:1.1-2.6, $p=0.02$) and HPV mRNA E6&E7 positivity (OR:1.7,95%CI:1.1-2.8, $p=0.03$). Remarkably, an isolated abnormal cytologic finding did not appear to be a discriminating factor for STDs prevalence ($p=0.11$). Additionally, HPV vaccinated women were less likely to host a pathogen (STDs) (OR:0.4,95%CI:0.3-0.7, $p=0.0005$), however, a recent partner's change (last 12 months) was an aggravating factor (OR:2.3,95%CI:1.3-4.0, $p=0.005$), while consistent condom use ($\geq 90\%$) was not correlated with a concurrent STD ($p=0.52$), nor did smoking ($p=0.15$).

Conclusions

In this study, aspects of sexual behavior represented predicting factors for women to host STDs (mainly Ureaplasma spp). Abnormal colposcopic findings, as well as HPV DNA or mRNA E6&E7 positivity can be also related to other sexually transmitted pathogens' existence and should prompt gynecologists for further investigation.

Cervical cytology - HPV infection and Sexually Transmitted Pathogens: A molecular epidemiology study

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Background

HPV prevalence and hrHPV persistence consequences have been extensively investigated in the last decades; nevertheless, the possible association of other sexually transmitted pathogens with HPV cervical infection has not yet been fully elucidated.

Aims

This study aims to investigate the possible association of Sexually Transmitted Infections (STIs) with cervical cytology and HPV genotyping results in a Greek population.

Material & Methods

Liquid based cytology and molecular detection for both HPV and STIs was performed in liquid based cervical cytology samples from 2268 women visiting outpatient Gynecology Departments for routine cervical screening between October 2015 and June 2017.

Results

Mean age of women was 37.0 ± 11.7 years. Among cases with valid STIs detection result, 722 (33.30%) tested positive, with a mean age of 34.23 ± 10.87 years, whereas, those tested negative had a lower mean age 38.34 ± 11.83 years ($p < 0.05$). Out of the total positive STIs cases, Chlamydia trachomatis was found in 59 (8.2%), Mycoplasma hominis in 156 (21.6%), Mycoplasma genitalium in 14 (1.9%) and Ureaplasma spp in 555 (76.9%); in 73 samples (10.1%) had two infections; no sample had three or more infections. HPV was detected in 357 out of 1385 samples (25.8%) with valid HPV typing result. The mean age of HPV positive women was 32.0 ± 8.4 years, whereas it was higher for the HPV negative (N=1028) cases: 34.4 ± 9.2 ($p < 0.05$). Out of the with a valid result both for STIs and HPV detection (1361), women with an HPV positive sample were more likely to harbor a sexually transmitted pathogen (OR:2.69, 95%CI:2.10-3.46, $p < 0.05$). STIs positivity presented significant heterogeneity between NILM and LSIL cases, with 28.9% of NILM and 46.33% of LSIL cases harboring an STI ($p < 0.05$).

Conclusions

In a population with a high prevalence for STIs, an association was established between pathogen detection and HPV infection or abnormal cytology; this finding calls for further investigation.

Establishing a Rapid Diagnosis Service (RDS) for Suspected Endometrial Cancer.

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Aims

NHS England recommends implementation of RDS by April 2024, aiming to diagnose cancer faster and improve patient experience. By developing best practice timed pathways, we aimed to achieve the Faster Diagnosis Standard (FDS) and cancer treatment within 62 days of referral.

Background

The NHS Long-term Plan recommends that by 2028, 75% of cancers should be diagnosed at an early stage, improving survival statistics. Prior to implementing the RDS, we had no FDS Coordinator, and our 62-day performance target was only achieved in 2 out of 12 months between April 2019-April 2020.

Methods

An initial audit of rapid access service referrals determined that the time from referral to initial review was 12 days. Only 52% had an ultrasound (USS) and no hysteroscopies were performed in clinic. An RDS service proposal was submitted in December 2020, requesting financial support for additional resources required for the facilitation of a one-stop clinic.

Results

Since introducing the RDS in June 2022, we are the highest achiever of the FDS in our region (96.2% in December 2022). We offer same-day USS and hysteroscopy, excluding cancer faster. 95% of patients rated their satisfaction as 10/10. Treatment targets are still being affected by bottlenecks due to theatre capacity.

Conclusions

Since implementation of the RDS, we regularly exceed the expected target. Patient satisfaction is excellent due to a standardised and one-stop service.

After the success of the endometrial RDS, we now plan to introduce this service for the other gynae cancer tumour sites. Regional work is ongoing to improve local 62-day data.

P-84 and BGCS Short

GD2 and GD3 gangliosides as a diagnostic biomarkers for all stages and subtypes of ovarian cancer

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Aims

The aim of was to characterize the expression of GD2 and GD3 in OC tissue and serum and to develop and validate a method for early detection of OC.

Background

OC is the deadliest gynecological cancer, often diagnosed at advanced stages. A fast and accurate diagnostic method for early-stage OC is needed. The tumor marker gangliosides, GD2 and GD3, exhibit properties that make them ideal potential diagnostic biomarkers but they have never before been quantified in OC.

Methods

We evaluated GD2 and GD3 expression in tissue and serum samples of invasive epithelial OC, healthy donors, non-malignant gynaecological conditions, and other cancers. GD2/GD3 levels were evaluated in tissue samples by immunohistochemistry (n=299), and in two cohorts of serum samples by quantitative ELISA. A Discovery Cohort (n=379) showed feasibility of GD2/GD3 quantitative ELISA for diagnosing OC, and a subsequent Model Cohort (n=200) was used to train and cross-validate a diagnostic model.

Results

GD2/GD3 were expressed in tissues of all OC subtypes and FIGO stages but not in surrounding healthy tissue or other controls. In serum, GD2/GD3 were elevated in patients with OC. A novel diagnostic model was superior to the standard of care (CA125, p<0.001) at detecting OC, especially in in early-stage (I/II) OC samples.

Conclusions

A diagnostic model combining GD2/GD3 quantification in serum had diagnostic power for all subtypes and all stages of OC, including early-stage. Future work will aim to validate these biomarkers in independent prospective studies.

Raman Spectroscopy as an early detection test for Ovarian Cancer

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Aims

To evaluate the diagnostic ability of Raman spectroscopy for ovarian cancer.

Background

Ovarian cancer continues to be a common cause of cancer death, with 60% of cases being diagnosed in advanced disease. Efforts to explore population screening have not demonstrated a reduction in mortality. Stage-based survival statistics continue to validate the need for more reliable early tests. It is uncertain at what point in the progression from pre-cancer to invasive cancer the current commonly used tumour marker, Ca-125, starts to rise. There is consequently a great need for a more specific biomarker or alternative test for early diagnosis.

Methods

Patients referred to oncology and two week wait gynaecology clinics with suspected ovarian cancer were recruited to the study. Blood samples were collected prior to any treatment. Plasma aliquots were snap frozen and batch analysed using drop coated deposition Raman spectroscopy.

Results

Following exclusion of participants whose final diagnosis were other tumour types, there were 55 participants in the benign group, 15 borderline and 48 cancers. Training models detected cancer with a sensitivity of 76%, specificity of 87% and AUC of 0.87 against the benign group. The model performed better in the cancer versus borderline group with sensitivity of 88%, specificity of 82% and AUC 0.93.

Conclusions

There appears to be a significant role for Raman spectroscopy in the early diagnosis of ovarian cancer. The outlined model for prediction of pathology needs to be independently tested by cross validation, and I plan to present the updated results at the conference.

Attenuated Total Reflection - Fourier Transform Infrared and Raman Spectroscopies for rapid detection of endometrial cancer

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Aims

Our aim is to simultaneously assess the ability of Attenuated Total Reflection - Fourier Transform Infrared (ATR-FtIR) and Raman spectroscopies to detect endometrial cancer (EC) using fresh and dry blood plasma.

Background

EC is the 6th most common cancer in women worldwide, yet current diagnostic pathways are invasive, expensive and time-consuming. ATR-FtIR and Raman spectroscopies have shown promise as alternative EC diagnostic approaches. A direct comparison on the two techniques' performance for blood plasma, and clarification on wet analysis feasibility, are required to determine the best approach to rapid bed-side diagnosis.

Methods

Plasma of women with EC (n=21) and healthy controls (n=34) was stored at -80°C, thawed for simultaneous fresh analyses with ATR-FtIR and Raman spectroscopies, and dried for additional ATR-FtIR spectral acquisitions. ATR-FtIR and Raman spectra were acquired with boro-silicate glass substrates covered by aluminium-tape, and quartz substrates, respectively. Data pre-processing (spectral cutting, Savitzky-Golay filtering, vector normalisation) and classification were performed with Quasar-Orange 1.7.0 toolbox.

Results

ATR-FtIR analysis of wet and dry plasma detected EC with 75% and 93% sensitivity, 100% and 95% specificity, and 90% and 94%, clinical accuracy, respectively. Raman analysis detected EC with 91% sensitivity, 100% specificity and 97% clinical accuracy. Among other classifiers used here, Support Vector Machine provided the lowest misclassification for both spectroscopies methods.

Conclusions

ATR-FtIR and Raman spectroscopies show comparable effectiveness for minimally invasive EC detection. We demonstrated the feasibility of performing rapid wet analysis with both techniques. ATR-FtIR spectroscopy cost-effectiveness can be significantly increased with routine use of aluminium substrates.

BRCA Awareness and testing experience in the UK Jewish population: a qualitative study

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Aims

Qualitative study to understand the factors impacting BRCA awareness and testing experiences in the UK Jewish population, and suggestions for improvement.

Background

1-in-40 Ashkenazi Jewish people carry a pathogenic variant in BRCA1/BRCA2. In 2023 NHS England will offer population genetic testing (PGT) to Jewish individuals, however there is a lack of qualitative research on the awareness and experiences of genetic testing amongst this population.

Methods

1:1 semi-structured interviews of Jewish participants who underwent BRCA testing in the UK, using a using a pre-defined topic guide, with applied thematic analysis.

Results

32 participants (28 carriers, 4 non-carriers) were interviewed. There was no decision-regret although there was huge variation in satisfaction with test-experience. Five themes emerged: A) Individual differences regarding personal/family history of cancer, demographics and personal attitudes/approach, B) Healthcare professionals support, C) Pathway access and integration, D) Familial and partner relationships and dynamics, and E) Jewish community factors. These intersected at various time points along the testing pathway. Testing was largely triggered by connecting information to a personal/family history of cancer. Suggestions were given on methods to increase UK Jewish community awareness, the need for information and support services to be personally relevant, and pro-active case management of carriers.

Conclusions

There is a need to improve UK Jewish community BRCA awareness, and to highlight personal relevance of testing for individuals without a personal/FH of cancer. Traditional NHS testing criteria caused multiple issues regarding test-access and experience for some. Carriers want information and support services tailored to their individual circumstances.

Quality of life after endometrial cancer prevention: a systematic review

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Aims

This systematic review aims to summarise the evidence on quality of life (QoL) after risk-reducing hysterectomy (RRH) for endometrial cancer (EC) prevention.

Background

RRH is the gold-standard prevention for EC. Knowledge of the impact on QoL is crucial for decision-making, as patients must balance this against the benefit from cancer risk-reduction. This also allows robust health-economic evaluation.

Methods

We searched major databases until July 2022 (CRD42022347631). Given the paucity of data on RRH, we also included hysterectomy as treatment for benign disease. We used validated quality-assessment tools and performed qualitative synthesis of QoL outcomes.

Results

Four studies (64 patients) reported on RRH, 25 studies (1268 patients) on hysterectomy as treatment for uterine bleeding. There was moderate risk-of-bias in many studies. Following RRH, three qualitative studies found substantially lowered cancer-worry, with no decision-regret. Oophorectomy (for ovarian cancer prevention) severely impaired menopause-specific QoL and sexual-function, particularly without hormone-replacement. Quantitative studies supported these results, finding low distress and generally high satisfaction. Hysterectomy as treatment of bleeding improved QoL, resulted in high satisfaction, and no change or improvements in sexual and urinary function, although small numbers reported worsening.

Conclusions

There is very limited evidence on QoL after RRH. Whilst there are benefits, most adverse consequences arise from oophorectomy. Benign hysterectomy allows for some limited comparison; however, more research is needed for outcomes in the population of women at increased EC risk.

BRCA-related genetic testing information provision online: an opportunity for improvement

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Aims

To evaluate the online provision of information on BRCA1/2-testing and related activities by UK Jewish community organisations (JCO), national cancer organisations (NCO), and testing service providers (TSP).

Background

Jewish individuals have a higher carrier frequency of BRCA1/2 pathogenic variants (1/40) compared to the general population (1/250). BRCA1/2 population-testing is now available (since Feb-2023) for UK Jewish individuals but information provision online is unknown.

Methods

Google searches for UK organisations offering BRCA1/2 genetic testing information were performed using pre-defined keywords. Organisations from the first 100 websites were assessed and categorised into JCOs, NCOs, and TSPs. These were reviewed and breadth of BRCA1/2 testing information was evaluated using a content checklist relevant to UK Jewish people considering testing. Quality of information provided was assessed using the validated DISCERN questionnaire.

Results

We identified 188 different organisations (JCOs=76, NCOs=85, TSPs=27). Twenty-percent (15/76) JCOs and 60% (50/85) NCOs provided BRCA-related activities or mentioned them in their remit. Of the 15 JCOs, 6 had information about the carrier frequency of BRCA1/2 variants in Jewish individuals. Overall quality of information regarding BRCA1/2 testing was moderately high (n=11) or high (n=2) on only 6.9% of all websites: 2.6% of JCOs scored moderately high (2/76); 11.8% of NCOs scored moderately high (8/85) or high (2/85); and 3.7% of TSPs scored moderately high (1/27). NCOs had more information compared to JCOs (Pearson's=4.852, p=0.035).

Conclusion

Though provision was highest in NCOs, there is an overall scarcity of high-quality BRCA-related information online. Our findings have implications for the NHS-England Jewish BRCA-programme.

PRECISION-Predicting Risk of Endometrial Cancer In aSymptomatic wOmeN

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Aims

To develop a well-calibrated endometrial cancer (EC) risk prediction model and validate it for primary care use.

Background

Increasing EC incidence threatens to overwhelm the healthcare system. Its association with modifiable variables makes primary EC prevention appealing but is, as yet, untested. Directing intervention towards those at greatest risk would maximise benefit and minimise harm

Methods

A flexible parametric survival model based on established disease risk factors was built using data from the UK Biobank (222,031 females, 902 incident EC cases). Model fit was improved with variable transformation and stepwise backward selection. Missing data were handled using multiple imputation and bootstrapping (100-fold) was applied for internal validation. The Clinical Practice Research Datalink, consisting of 3,094,371 women aged 45-60, of whom 8,585 developed EC during 10 year follow-up, was used for external validation. Model performance was assessed using calibration plots, the C-statistic and compared with published models.

Results

The final model incorporated age, body mass index, waist circumference, age at menarche and last birth, late menopause (≥ 55 years), current hormone replacement or tamoxifen use, oral contraceptive pill use (≥ 5 years), type 2 diabetes, smoking and family history of bowel cancer. It retained its excellent calibration on external validation (calibration slope 1.143), with moderate-good discrimination (C-statistic 0.698) and outperformed the EPIC and PLCO/NIH-AARP models.

Conclusions

The PRECISION model, using easily measurable anthropometric, reproductive, personal and family history, accurately quantifies a woman's 10 year risk of EC. It should be used to determine eligibility for primary EC prevention trials and for targeted resource allocation.

Exploring the results of Endometrial Biopsies analysed in a Cancer Centre

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Aims

To evaluate endometrial biopsy samples analysed at our unit over a 5-year period.

Background

In clinical practice, endometrial biopsies are taken for a variety of indications. Adequate samples add to the clinical picture and inform further management. Conversely, inadequate ones can theoretically delay treatment. Many studies have identified increased age and a thin endometrium as risk factors for inadequate samples.

Methods

This study involved a retrospective data collection and analysis, between January 2012 and December 2017.

Results

A total of 35619 biopsies were analysed. About half of these were from women over 50 years of age. 6.73% biopsies were insufficient; 78.12% of these were in women over the age of 50. The setting of biopsy – primary vs secondary care – did not alter the quality of the sample. Common indications included PMB (28.11%) and Menorrhagia (13.51%). Of the total number of biopsies, 464 (1.30%) were found to be primary uterine cancer; adenocarcinoma being the commonest (85%). 61% of cancer diagnoses were secondary to PMB. 80% of all women with cancer were over 55 years of age, while only 6% were between 50 and 55.

Conclusions

A majority of biopsy results are benign. Malignancy is most likely to be diagnosed over the age of 55. Factors such as age have a higher impact on the adequacy of endometrial biopsies than operator skill. The results also raise the question of whether patients with PMB should have an endometrial biopsy taken in the community in order to expedite the cancer pathway.

P-92 and BGCS Short

Understanding the diagnostic outcome of urgent referrals for suspected gynaecological cancer in England and Wales: A Systematic Literature Review

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Aims

To establish which symptoms patients are referred with to the two-week wait (2WW) pathway for suspected gynaecological cancer, which diagnoses are made, and to assess whether symptoms are in line with referral guidelines.

Background

In England between April 2020 and March 2021 there were 198,783 referrals to the 2WW suspected gynaecological cancer pathway, of which 4.0% were diagnosed with cancer. There is little publicly available national data on the details of cancer diagnoses and the outcomes of the 96.0% patients not diagnosed.

Methods

A SLR was conducted which identified 390 unique records. Additionally reference lists of included papers and conference proceedings from BGCS Annual Scientific meetings were searched. In total 29 studies were included in the review.

Results

This SLR found patients were referred with a range of symptoms. There was variation of 4.2-100% in the proportion of referrals considered appropriate by study authors. The pooled conversion rate of gynaecological cancers ranged from 2.5% (cervical) to 14.6% (vulval). Non-cancer diagnoses ranged from no pathology to pre-cancerous cell changes. The conversion rate by symptoms varied across studies from 0% to 50%.

Conclusions

This review provides insight into patients' diagnostic outcomes by suspected cancer referral type and symptom, and demonstrates variation in conversion rates by these characteristics. It supports the need for analysis of English and Welsh datasets which could deliver detailed insights into cancer and non-cancer diagnoses.

Rarely 'just' endometrial hyperplasia with atypia; audit of outcomes of surgical and medical management

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Aims

Audit our management for AH, including management and follow-up of those women managed medically. ⁵

Background

Endometrial cancer (EC) is the commonest gynaecological malignancy with 9,703 cases identified each year between 2016-2018 in the UK. ¹ Endometrial hyperplasia with atypia (AH) is a pre-malignant lesion which may be associated with an underlying EC or high risk of progression to EC. ² AH is an indication for hysterectomy. However, some will either wish to avoid surgery (due to fertility concerns) or not be fit enough to proceed with surgery for conditions that may be optimized to improve safety. ^{3 4}

Methods

Somerset NHS FT audit team identified 144 women with pathology suggestive of AH 1/1/2020 to end 2021. Pathology reports were checked and any women who did not have cellular atypia were excluded. Electronic medical records were examined for outcomes.

Results

We identified 62 women with AH and 82% (51/62) were managed with definitive surgery (hysterectomy). 35/51 (68.6%) had evidence of EC at hysterectomy.

Of the 11 women not managed surgically at diagnosis, all had documented reasons for medical management. 5/13 cleared their AH (45.5% complete response) whilst 3/11 (27.3%) had evidence of EC on subsequent biopsies. No patients were lost to follow up.

Conclusions

The majority of our patients had evidence of EC at hysterectomy and AH should be treated as if there is an underlying cancer. Medical management with mirena coil (and bariatric referral where relevant) resulted in complete response in just under half those managed conservatively.

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Experiences of women following risk-reducing surgery on the PROTECTOR trial: a qualitative study

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Aims

Qualitative study to explore satisfaction, experiences and outcomes of risk-reducing early-salpingectomy (RRES) and delayed-oophorectomy (DO) or salpingo-oophorectomy (RRSO) on health and wellbeing.

Background

The PROTECTOR trial is evaluating outcomes of pre-menopausal participants at increased risk of ovarian cancer (OC) who choose either RRESDO or RRSO for risk-reduction, or no surgery.

Methods

In-depth semi-structured 1:1 telephone interviews using a pre-developed topic-guide until sufficient information power reached. All interviews were audio-recorded, transcribed verbatim, and analysed using applied thematic analysis. Data was managed using NVIVO-v12.

Results

17 patients were interviewed: 6 following RRSO, 9 following RRES, 2 following DO. Median follow-up was 31 months (IQR 11-34 months). 6 themes were interpreted: benefits of surgery, impact of surgery, cancer-worry, decision-regret, menopause and hormone-replacement therapy (HRT), and satisfaction with services. Reported benefits of RRES included a reduction in cancer worry without significant menopausal impact and helping others through research participation. There was no decision-regret after RRES/DO/RRSO, with generally high satisfaction. Participants greatly valued the option of RRESDO and feel this should continue to be offered. Issues included uncertainty over timing of DO, particularly for patients without routine follow-up, as well as worry over menopausal symptoms, and their remaining level of OC risk. There was variation with post-operative support received regarding menopause management.

Conclusions

Women reported being highly satisfied with RRES, DO and RRSO. Patients value specialist advice on menopause and HRT pre- and post-operatively. Patients who have undergone RRES should have regular follow-up with their clinical team to enable discussions over planning of DO.

Socioeconomic Inequalities in the Diagnosis and Treatment of Ovarian Cancer: A Study Using Linked English Cancer Registry Data

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Aims

We examined inequalities in treatments and timeliness of diagnosis and treatment amongst patients with ovarian cancer in England.

Background

The National Ovarian Cancer Audit demonstrated that only 51% of patients receive standard-of-care treatment. We examined population-level data to evaluate if patients from more deprived areas were even less likely to receive timely, optimal treatment than patients from less-deprived areas.

Methods

The Cancer Registry identified all patients diagnosed with ovarian cancer in England between 2016-2017. Cancer Registry data were linked to Hospital Episode Statistic, Cancer Pathway, Systematic Anti-Cancer Dataset and Diagnostic Imaging Datasets. Lasso logistic regression identified predictors of ovarian cancer treatment. The secondary care diagnostic interval was used to calculate the time to diagnosis and treatment, analysed using quantile regression.

Results

A total of 9,572 patients were included in the analyses. Area deprivation was a significant predictor of receipt of surgery and chemotherapy. The odds of having surgery and chemotherapy were 0.71 and 0.69, respectively, for patients from the most deprived quintile. The treatment interval was significantly longer for patients from the most deprived areas after adjusting for important factors (median difference 4.53 days [95% CI 2.46-6.61]).

Conclusions

We demonstrate that women from more deprived areas in England are less likely to receive surgery or chemotherapy and wait longer to commence treatment. Further research is needed to understand why and what action can reduce inequalities in treatments and timeliness.

New algorithms to reduce unnecessary referrals to gynaecology through the Rapid Access Pathway

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Introduction

The “Rapid Access Referral Pathway” was introduced so that a specialist can assess patients with symptoms suggestive of cancer quickly through the “Two-Week Wait” appointment system. NICE developed guideline (NG12) based on “risk threshold” using 3% positive predictive value (PPV) as a cut-off to justify referral. It is observed that there are an increased number of unnecessary referrals to the gynaecology clinics through this pathway.

Methods

Retrospective review of all “Two-Week Wait” referrals made to SWBH between 1 January 2021 and 31 December 2021. Postmenopausal bleeding (PMB) referrals were excluded as it is well-reported that the cancer rate in these women exceeds the “risk threshold”.

Results

A total of 2908 “Two-Week Wait” referrals was made to the gynaecology department. Of them, 916 were excluded (PMB women). In the remaining 1992, 45 (2.26%) were found to have gynaecological cancer, which is below the “risk threshold” set by NICE. This implies that 492/1992 (25%) were unnecessarily referred through the “Rapid Access Pathway”.

Conclusion

Unnecessary referrals through the “Rapid Access Pathway” consume capacity and delay the access of routine patients to services. Therefore; to optimise referrals, improve productivity and reduce patients’ anxiety, we produced referral algorithms for the 9 common gynaecological conditions that may trigger “Two-Week Wait” appointment to help general practitioners (GPs) make the right decisions. These algorithms, developed using the best available evidence including NICE and RCOG guidelines, have been approved by the GPs and gynaecologists in the Black Country region and will be presented in the congress.

Key words

Rapid Access Referral Pathway, Two-Week Wait appointment system

Regional experience of implementing Mismatch Repair immunohistochemistry testing of endometrial cancer patients as a screening tool for Lynch Syndrome.

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Introduction

The National Institute for Health and Care Excellence published guidance for Mismatch-repair (MMR) testing in endometrial cancer (EC) patients as a screening tool for Lynch syndrome (LS) in October-2020. This has since been implemented in the North-East regional cancer care alliance through immunohistochemistry (IHC) testing for the MMR markers: MLH1, PMS2, MSH2, and MSH6. We aim to review our experience in implementing LS screening via MMR testing and assess the efficacy of this screening model in EC care.

Methods

All patients with a new diagnosis of EC referred for Multi-Disciplinary Team review from six NHS trusts in the North East and North Cumbria were included. Data describing the status and outcome of MMR testing were collected and analysed.

Result

A total of 202 patients were identified, out of which 97% (195) had MMR status reported. Out of the patients eligible for MMR testing, approximately 73% were MMR-proficient, and therefore did not require further testing. Using this model, at least 5% of patients were identified as at risk for LS and required referral to specialist clinical genetics service for consideration of germline testing. The final outcomes of these referrals are pending.

Conclusion

MMR testing rate in EC in the Northeast of England region remains >95% in line with our pilot data from implementation of the screening project in 2021. The implementation of this screening model in our region has proven to be effective in identifying EC patients with suspected LS, supporting the importance of this screening model in EC care.

Paraneoplastic neurological syndromes and the importance of prompt recognition to aid the diagnosis of underlying gynaecological malignancy

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Aims

This report details the cases of two women – one in her 70s and one in her 80s - who developed unexplained cerebellar symptoms, which eventually led to the investigation and discovery of underlying gynecologic malignancy in one, while the investigations for the second are still ongoing.

Background

Paraneoplastic Neurological Syndromes (PNS) describe a wide variety of conditions where neurological symptoms are indirectly caused by an underlying malignancy via immune-mediated pathogenesis. This is a rare presentation of malignancy and is extremely susceptible to misdiagnosis. One such PNS is paraneoplastic cerebellar ataxia, which is most often a result of gynecologic cancer.

Methods

Two patients were referred from their local or community hospitals to the neurology department of a large tertiary center with ongoing neurological symptoms of unknown cause. They underwent surgical and histological investigation for underlying malignancy

Results

One patient was found to have Stage 1a serous type tubal malignancy. The second patient has been so far only found to have incidental hyperplasia with no malignancy.

Conclusions

PNS is a rare and often debilitating disorder caused by underlying malignancy, which may not have yet been diagnosed. Prompt recognition of PNS may lead to improved outcomes for patients due to early identification of malignancy. Further work is needed to promote understanding of PNS among clinicians and to develop guidelines to aid with diagnosis and correlation of the underlying malignancy.

Help seeking behaviour in women diagnosed with gynaecological cancer: what do we know?

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Aims

To explore help seeking behaviour in women diagnosed with gynaecological cancer and their perception of pelvic examination.

Background

Gynaecological cancer survival in the UK lags that of other European countries. One of the reasons for this is thought to be due to patients' delayed help seeking. Many symptoms of gynaecological cancer can appear vague, involve bowel or urinary symptoms and can often be signs of diseases that are not cancer, making it more difficult for patients to think their symptoms are serious.

Methods

Qualitative semi-structured interviews. One health board in Scotland. Interviews were conducted by telephone. Framework analysis used the COM-B behaviour change model concepts of capability, opportunity, and motivation.

Results

Data was compatible with all three domains of the COM-B framework. Capability related to symptom knowledge and health literacy. Misattribution of symptoms to menopause was common, while instinct was often acted upon in the absence of any working diagnosis. Opportunity related to GP appointment booking systems and finding time from work or caring responsibilities. Motivation to seek help, although influenced by experience of friends and family, was related to perceived seriousness, persistence or worsening of symptoms. No patient described pelvic examination as a barrier to help seeking.

Conclusions

Patients' reasons for seeking help with symptoms potentially indicating cancer are complex. The COM-B framework provides a way of understanding this complexity. Interventions to hasten help seeking need to consider all these factors.

P-100

Exploration of preliminary objective triage by menopause score and CA 125 result prior to accelerating fast track booking for suspected ovarian cancer. A potential pathway navigator role?

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Aims

Multidisciplinary teams (MDT) use the risk of malignancy index (RMI) score, (multiply menopausal status 1 or 3 x ultrasound score 0 -3 x CA 125 level), using > 200, to triage urgency and management in ? ovarian cancer cases. The most powerful determinant of the RMI score variables is CA 125 level, an objective number.

Methods

Evaluation of an ovarian two week wait telephone clinic of one consultant gynaecological oncologist was undertaken. Enquiry re menopause status was scored as 1 for pre and 3 for postmenopausal or uncertain.

CA 125 levels of >67u/ml for premenopausal and >23u/ml for postmenopausal women prospectively precipitated urgent cross sectional imaging request and MDT opinion.

These CA 125 cut thresholds were calculated using an assumption that the RMI imaging score, regardless of result availability, could be 3. Women who could not exceed an RMI score of >200 were invariably informed they were extremely unlikely to have cancer, removed from the tracker and appropriate follow up arranged.

Results

140 consecutive cases were analysed. 43% were deemed premenopausal and 57% postmenopausal. 20 women had cancer, 18 of whom had an RMI >200. 120 were benign, only 23 classified as accelerate referral to imaging.

Conclusions

Telephone triage via a questionnaire determining menopausal status and the CA 125 result can offer a sensitivity for cancer of 90% and urgent expert review of only 20% of benign cases. This rapid initial assessment could be presented by a trained pathway navigator. Substantial savings in NHS cancer services resources, anxieties all around and patient morbidity may result.

P-101

Development and persistence of peri-operative hyperlactaemia is associated with significantly longer ICU, HDU and total inpatient length of stay following maximal effort cytoreductive surgery for advanced ovarian cancer

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Aims

Evaluate the role of peri-operative serum lactate as a biochemical predictor of intensive care (ICU), high dependency (HDU) and total inpatient length of stay (LOS) following maximal effort cytoreductive surgery for advanced ovarian cancer (AOC).

Background

Prolonged ICU admission following surgery is associated with increased patient morbidity and mortality.

Methods

All patients undergoing either primary or delayed debulking surgery for AOC in a large UK cancer centre over a 34 month period (2018-2021) were identified using a Trust cancer registry. Data was collected by retrospectively accessing patient electronic care records.

Results

N=63. 20.6% patients were aged >75 years. 37.1% underwent primary and 68.3% delayed surgery. Intra-operative serum lactate levels ≥ 4 mmol/L conferred a significantly longer post-operative ICU LOS (P=0.01); as did the persistence of hyperlactaemia to the end of surgery (p=0.04). In addition, a longer time for lactate to normalise post-operatively (>1500 minutes) resulted in longer ICU (P<0.00001), HDU (P=0.005) and total inpatient (P=0.03) stay. Surgical complexity score (SCS) ≥ 8 ; Peritoneal Carcinomatosis Index (PCI) ≥ 20 ; EBL >1000mLs; and operating time >8 hours were all associated with significant higher peri-operative lactate levels and a longer time for established hyperlactaemia to resolve.

Conclusions

Serum lactate represents a reliable predictor of ICU, HDU and total inpatient LOS following maximal effort cytoreductive surgery for AOC; and – given the additional patient morbidity associated with a prolonged ICU LOS – should serve as an important prompt for targeted intervention and early correction.

Radiologically-suspicious cardiophrenic lymph nodes are a reliable predictor of tumour burden, upper abdominal involvement and surgical complexity score in advanced ovarian cancer – without impacting overall survival. Data from a large UK cancer centre over a 44 month period.

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Aims

Evaluate the association between radiologically suspicious cardiophrenic lymph nodes (CPLN) in advanced ovarian cancer (AOC) and tumour burden, surgical complexity and survival.

Background

The significance of abnormal CPLN – denoting FIGO stage IVb disease – at diagnosis of AOC remains unclear.

Methods

All patients undergoing maximal cytoreductive surgery for AOC in a UK cancer centre over a 44 month period (Nov 2016-Jun 2020) were included. Radiologically suspicious CPLN were retrospectively identified on index CT according to RECIST criteria.

Results

N=151. 43.0% of patients had radiologically abnormal CPLN on index CT at diagnosis. Those undergoing either PDS or DDS with suspected CPLN involvement had significantly more ascites (P=0.003); omental (P=0.01); and diaphragmatic disease (P<0.0001) intra-operatively – compared to the radiologically ‘node-negative’ surgical cohort. At PDS, 60.0% versus 22.6% had a surgical complexity score of \geq equal (P=0.02) comparing those with ‘abnormal’ versus ‘normal’ CPLN on CT. This difference was not significant at DDS. Median overall survival (OS) at PDS to R0 was 39.2 versus 50.2 months respectively for patients with radiologically ‘positive’ versus ‘negative’ CPLN (P>0.05). At DDS to R0, median OS again did not reach significance when calculated according to cardiophrenic status on imaging (P>0.05).

Conclusions

Radiologically suspicious CPLN in AOC herald increased tumour volume, upper abdominal involvement and potential for high complexity surgery. Detection should therefore prompt referral to centres with experience of high-volume disease and upper abdominal procedures. Abnormal CPLN on imaging does not negatively impact survival – questioning the appropriateness of definition as true stage IV disease.

Cardiophrenic lymph node dissection of radiologically suspicious nodes does not improve overall survival at maximal effort cytoreductive surgery for advanced ovarian cancer. Provisional data from a large UK cancer centre.

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Aims

Evaluate the impact of dissection of radiologically suspicious cardiophrenic lymph nodes (CPLN) at maximal effort cytoreductive surgery for advanced ovarian cancer (AOC) on overall survival.

Background

Alongside platinum-sensitivity, achievement of no residual disease (R0) at cytoreductive surgery is one of the most important prognostic indicators in AOC. Yet, the value of cardiophrenic lymph node dissection (CPLND) in the context of radiologically abnormal cardiophrenic nodes remains unclear.

Methods

All patients undergoing CPLND as a component of primary (PDS) or delayed (DDS) cytoreductive surgery for AOC in a UK cancer centre were identified and histopathology reviewed, confirming final cardiophrenic status as either 'benign' or 'malignant'.

Results

N=16. Radiologically-suspected CPLN involvement was confirmed on final histopathology in 13 cases – equating to a positive predictive value for CT of 0.81. Comparing survival for all patients (PDS and DDS) with radiologically 'abnormal' cardiophrenic nodes undergoing CPLND versus omission of cardiophrenic dissection – in all of whom abdomino-pelvic R0 was achieved – median OS had not been met at the time of analysis. Mean OS, however, was calculated as 42.9 (95% CI 32.8-52.9) versus 43.9 (95% CI 34.0-53.8) months for 'CPLND' versus 'no CPLND' cohorts respectively (P>0.05).

Conclusions

CT is a reliable predictor of CPLN involvement. Our study does not prove CPLND of radiologically suspicious cardiophrenics to confer survival advantage when performed in addition to complete abdomino-pelvic cytoreduction. Our limited numbers, however, reflect the relatively recent introduction of CPLND technique within our centre – and so we suggest larger, multi-centre collaboration is needed to generate more meaningful data.

Low-pressure pneumoperitoneum omits the need for spinal anaesthetic at TLH in high-risk endometrial cancer patients with no increase in post-operative pain scores or LOS. Data from a UK cancer centre.

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Aims

To compare peri-operative outcomes for patients undergoing total laparoscopic hysterectomy (TLH) by Gynaecological Oncologists utilising standard (≥ 12 mmHg) versus low (7mmHg) pneumoperitoneum pressures.

Background

TLH is a common gynaecological-oncology procedure, most often undertaken for endometrial cancer. Such patients are often obese, representing increased anaesthetic and surgical risk. As standard, TLH is performed under both general and regional anaesthetic; the aim of concurrent spinal to ensure adequate post-operative analgesia. The introduction of low-pressure systems at laparoscopy has, however, been shown to reduce pain following surgery – allowing re-consideration of approach to anaesthetic in such cases.

Methods

Patients undergoing TLH at standard pneumoperitoneum pressures (under combined GA and spinal) and those operated on at low pressures (under GA only) were identified. Data was collected retrospectively from electronic care records.

Results

N=23. Standard-pressure laparoscopy, under both GA and spinal, was performed in 16 patients; whilst 7 underwent low-pressure TLH, with omission of regional anaesthetic. We found no statistical difference in mean EBL; post-operative pain scores; nor LOS between cohorts ($p>0.05$).

Conclusions

Study numbers were limited, reflecting recent introduction of low-pressure laparoscopy into our centre. Our provisional results do, however, support omission of spinal anaesthetic at TLH in the context of low pneumoperitoneum pressures. This change in practice does not risk increased EBL, patient pain or LOS; but avoids the potential complications of regional anaesthetic: failure, infection, prolonged catheterisation and immobility – instead, promoting enhanced recovery in a high-risk patient population. Incorporating such an approach would be key in developing a safe day-case TLH service.

Does cytoreductive surgery impair the quality of life of advanced ovarian cancer patients? A prospective study at the University Hospitals of Leicester.

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Aim

To explore the effect of cytoreductive surgery on the quality of life of advanced ovarian cancer patients.

Background

Treatment of advanced ovarian cancer by cytoreductive surgery is well established to be the main core of management in the UK. It has shown to increase in the overall and progression free survival rates in patients. However, the effect of the surgery on quality of life has been controversial.

Methods

A prospective study was carried out in the University Hospitals of Leicester recruiting nineteen advanced ovarian cancer patients undergoing cytoreductive surgery from June 2021 to October 2022. Ethical approval was granted. Participants completed the Quality of Life Questionnaire EORTC QLQ-C30 version 3 questionnaire before cytoreductive surgery and 3 months postoperatively.

Results

The overall global health status of advanced ovarian cancer patients showed a decline after cytoreductive surgery. However, the decline was not statistically significant ($p=0.074$). The physical functions, role functioning and social functioning has demonstrated a significant decline 3 months after cytoreductive surgery.

The emotional wellbeing showed an increase from 66.7 preoperatively to 73.2 postoperatively ($p=0.233$). Moreover, the cognitive functioning did not show any difference before and after the cytoreductive surgery ($p=1$).

All symptoms were noted to worsen 3 months after cytoreductive surgery. However, the increase in fatigue, nausea and vomiting and financial difficulties was statistically significant.

Conclusions

Our study concluded that CRS intervention impaired the physical functioning and worsened the symptoms of the patients. However, the overall QOL was restored to baseline 3 months after the surgery.

The overall survival and progression free survival rates in advanced ovarian cancer patients undergoing cytoreductive surgery at the University Hospitals of Leicester: a prospective study.

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Aims

To explore the overall survival and progression free survival rates in advanced ovarian cancer patients undergoing cytoreductive surgery.

Background

Cytoreductive surgery is the cornerstone in the management of advanced ovarian cancer patients in the United Kingdom.

Methods

A prospective study was carried out in the University Hospitals of Leicester recruiting 26 patients with advanced ovarian cancer undergoing cytoreductive surgery from June 2021- July 2022. Ethical approval was granted prior to recruitment of patients.

Results

Cytoreductive surgery was performed for the 26 patients: 17 had interval cytoreductive surgery and 9 had primary cytoreductive surgery. Complete cytoreduction (R0) was achieved in 57.7% of the patients and suboptimal cytoreduction (R1) was performed in 15.4% of the patients.

The overall survival (OS) and progression free survival (PFS) were calculated from Kaplan Meier survival curves. The mean OS for all advanced ovarian cancer patients (n=26) participating in the study was 23.4 months. Moreover, the OS was shown to be 23.1, 20.8, and 17.3 months in advanced ovarian cancer patients undergoing interval debulking surgery, primary debulking surgery and palliative management.

The PFS was 16.8 months for advanced ovarian cancer patients following cytoreductive surgery. Furthermore, the progression free survival was 14.6 months in IDS and 18.6 months in PDS respectively.

Conclusions

The OS and PFS rates in advanced ovarian cancer patients undergoing cytoreductive surgery were 23.4 months and 16.8 months respectively.

Increasing Cancer Surgery activity in a Gynaecology Oncology service

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Aims

To change referral pathway for patients with suspected Gynaecological malignancies to improve outcomes and resource utilisation

Background

Referral processes for cases of new or suspected gynaecological malignancies were varied. Previous dataset was not accessible. New processes were required to establish dataset for Gynaecology Oncology service across three hospital sites; to expand the role of the nurse specialist in the pathway; to optimise the MDT; and, to apply for European Society of Gynaecology Oncology (ESGO) accreditation.

Methods

A Value Stream Analysis was conducted, mapping out current state and future state. New referral pathway was fully implemented, which included the appointment of a Gynaecology Oncology MDT Co-ordinator. Initial triage of gynaecological oncology referrals undertaken by the CNS, in conjunction with Consultant Gynaecological Oncologist. Patients are offered nursing support from point of referral.

Results

While overall gynaecology surgical activity decreased by 16.5% in 2021, due to the Covid-19 pandemic, there was an increase of 82.6% in Gynaecological Oncology surgical cases undertaken, compared to 2019 [2021 – 95 cases, v 52 cases in 2019]. Gynaecology Oncology MDT case discussions grew by 70% from 2019 to 2021; 356 cases discussed in 2019, compared to 513 in 2021. ESGO accreditation awarded.

Conclusion

By improving referral process and resourcing the front line of the pathway, patients with new or suspected cases of gynaecological malignancies were triaged promptly, received support from the Gynaecology Oncology ANP early in their journey and cancer surgery activity increased within current capacity.

Outcomes of women with advanced ovarian cancer unable to have surgery and factors contributing to the non-surgical management – data from the North Cancer Alliance of Scotland

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Aims

To determine oncological outcomes and reasons for not undergoing surgery in women with advanced high grade serous ovarian cancer (HGSOC) before and after COVID-19 pandemic.

Background

The best oncological outcomes for primary advanced HGSOC are achieved with a combination of debulking surgery and chemotherapy. Timing of surgery is determined by disease- and patient-related factors. A subgroup of women did not undergo surgery^{1,2}.

Methods

Seventy-two women with advanced HGSOC who did not undergo surgery were identified from North Cancer alliance database between March 2019 -February 2021. Age, stage, health board, treatment, timing of COVID-19 pandemic, reasons for not undergoing surgery, status at follow-up or date of death were recorded until February 2023.

Results

Median age at diagnosis was seventy-one years (40-89). Eighteen (25%) patients were diagnosed at Grampian, eighteen (25%) at Highlands, thirty-six (50%) at Tayside health boards. Forty-eight (66.6%) women had stage 4 disease. Forty-five (62.5%) patients commenced chemotherapy but did not complete treatment due to patient- and/or disease-related factors, and twenty-five (34.7%) patients were too unfit to receive curative treatment. Fifty-three (73.7%) women were diagnosed after the COVID-19 pandemic. Fifty-nine (82%) women died within a median of five months from diagnosis (0-27 months). Median follow-up of patients alive in February 2023 is sixteen months (0-39 months).

Conclusions

This cohort of patients had a poor prognosis, in line with published data³, with a survival of 18%. 73.7% of patients in this group were diagnosed after the COVID-19 pandemic. Factors in the local population may account for variations in oncological outcomes.

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Is bidirectional gastrointestinal endoscopy required for all patients diagnosed with mucinous ovarian cancer?

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Aims

To evaluate the use of oesophagogastroduodenoscopy (OGD) and colonoscopy in patients diagnosed with a mucinous ovarian cancer.

Background

Mucinous ovarian cancer accounts for 3% of all ovarian malignancy. Primary mucinous ovarian cancers are usually diagnosed at an early stage. The potential of a metastasis to the ovary from a primary gastrointestinal tumour should be considered in patients presenting with advanced disease. Studies have also proposed using simple rules to classify the ovarian tumours into primary or metastasis, where bilateral ovarian tumours and unilateral tumours <10cm are most likely metastatic and unilateral tumours >10cm primary ovarian.

Methods

Patients diagnosed with mucinous ovarian cancer at a tertiary gynae-oncology centre between 2018 and 2022 were identified and a retrospective review of electronic systems and case notes was undertaken.

Results

21 patients were identified. All patients had a pre-operative ultrasound scan and 3 patients had bilateral ovarian masses. All patients had an ovarian mass greater than 10cm. 1 patient had a concurrent cervical primary but none had evidence of metastasis. 15 (71%) patients underwent OGD and colonoscopy and all were normal with no evidence of a gastrointestinal primary. 3 of the 6 patients who did not have GI endoscopy were discussed at MDT as having definitively primary ovarian histology. The simple rules were correct in 86% of patients.

Conclusions

In our small cohort of patients, most underwent bidirectional GI endoscopy, but all were diagnosed with an ovarian primary.

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A Case of Ectopic Mammary Tissue of the Vulva in a Pregnant Female

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Background

Ectopic breast tissue occurs in 2% to 6% of women and displays the same pathophysiological changes as normal breast tissue. The vulva is an unusual site for this change and paucity of data means that management is typically on a case-by-case basis.

Case Details

A 34-year-old postpartum female presented with a right-sided vulval lesion first noted post miscarriage one year before presentation, followed by a marked increase in size in recent pregnancy/breastfeeding with marginal reduction after lactation cessation. Investigations, including a CT, MRI, and a wedge biopsy, confirmed a benign mammary-like glandular lesion—an interval MRI post-partum showed a reduction in the size of the vulval lesion. On examination, a lobular 3 cm diameter lesion was noted with a central orifice and no associated loco-regional lymphadenopathy. The patient requested removal due to the size of the lesion and asymmetrical anatomy. Following excision, the lesion was confirmed to be ectopic breast tissue with fibroadenoma/fibroadenomatoid hyperplasia foci.

Conclusion

As vulval malignancy is part of the differential diagnosis, the initial workup should include a biopsy and imaging with MRI to diagnose and aid in staging. A surgical approach is favoured where glandular tissue is present. It should aim to restore normal function and natural anatomy while achieving complete excision of the ectopic breast tissue to reduce the risk of recurrence of the mass and malignancy.

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Giant Condylomata Acuminatum of the Vulva - a benign mimic of Verrucous Carcinoma

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Background

Giant Condyloma Acuminatum (GCA) is a locally aggressive tumour with benign histological features commonly caused by Human Papilloma Virus (HPV) 6 or 11. These tumours could be locally destructive, with a risk of malignant transformation and a high rate of recurrence following treatment.

Case Summary

A 52-year-old postmenopausal female presented with a six-month history of vulval irritation. A firm white sclerotic lesion was noted at the initial review, and a punch biopsy taken showed lichen simplex chronicus. The filiform appearance raised concern regarding possible verrucous carcinoma. Subsequent incision biopsy showed a squamoproliferative lesion with clinical features of viral cytopathic effect in keeping with condyloma. She underwent a trial of immunotherapy (Imiquimod) and podophyllotoxin with no improvement. The patient remained symptomatic due to raised hyperkeratotic nature of the lesion, therefore elected for surgical excision. Follow-up at nine months showed excellent functional and cosmetic results with no evidence of recurrence.

Conclusion

Surgical management can be challenging depending on the size and location of the tumour. Obtaining a full-thickness incisional biopsy of the lesion is crucial to rule out underlying foci of malignancy and differentiate it from verrucous carcinoma. The mainstay of treatment is surgical alongside reconstructive techniques, including skin grafts (partial and full thickness) and local flaps, which may help restore anatomy and preserve function. A multi-disciplinary surgical team, including a plastic surgeon, will facilitate the best results for the patient.

P-115 and BGCS Short

Comparison of anastomotic leak rates following bowel resection in ovarian cytoreductive and colorectal cancer surgery: A Tertiary centre experience.

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Aims

To evaluate the incidence, surgical outcome and risk factors of anastomotic leak in ovarian cytoreductive surgery compared to leak rates in colorectal cancer patients.

Background

Complete cytoreduction confers survival benefit for ovarian cancer patients and may include bowel resection in order to remove all visible disease. Colorectal cancer patients treated with bowel resection often have confined intraluminal disease with curative treatment intent. We aim to comparing anastomotic leak rates between the two groups.

Methods

Retrospective cohort study of 262 ovarian cancer surgery with bowel resection, between 1 January 2010 and 31 December 2022 at the Royal Surrey NHS Foundation trust and 411 colorectal resections between 2014 and 2022.

Results

The overall rate of anastomotic leak was 4.6% in the ovarian cancer group and 1.9% in the colorectal group. The colorectal group primarily underwent minimally invasive surgery (MIS), while the ovarian cancer group predominantly underwent a laparotomic approach. Recto-sigmoid anastomosis was performed in over half of the cases in the ovarian cancer group. Multiple resections were more common in the ovarian cancer group compared to the colorectal group. The majority of ovarian cancer surgeries were of moderate to high surgical complexity. R0 was achieved in 42.9% of those who experienced anastomotic leak.

Conclusion

Differences in patient characteristics and disease pathology likely contribute to the varying rates of anastomotic leak between ovarian and colorectal cancer groups, despite consistent surgical expertise by colorectal surgeons in both groups.

P-116

Introduction of vNOTES (vaginal natural orifice transluminal endoscopic surgery) hysterectomy to St James's University Hospital, Leeds

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Aims

We aim to share our experience for the benefit of patients.

Background

A cancer unit lead and a urogynaecologist were trained to perform vNOTES surgery using Applied Medical equipment. The setting is a large university teaching hospital. The first procedure was performed on 28.03.22. There have been 22 procedures. Prospective data is being collected on surgical indication, patient characteristics, operative procedures and outcomes, complications and follow-up.

Methods

Women scheduled for TLH +/- BSO were offered vNOTES surgery, given a detailed explanation and patient information leaflet, informed that the procedure was new to Leeds but supported by RCT evidence of no increased complications, reduced length of stay in hospital and likely quicker return to normal activities. The only exclusion criterion was any concern of dense adhesions obliterating the Pouch of Douglas. Every patient asked to have vNOTES rather than laparoscopic surgery.

Results

17 patients had early endometrial cancer, 3 had atypical endometrial hyperplasia, one diagnostic hysterectomy for PID, one BRCA carrier with prolapse. Average age was 57 (35-81), average BMI 31 (21-40), average operating time 108 minutes (52-221). 2 patients had an anterior repair, 1 had a laparoscopy to release CO2. Length of stay – 9<12hours, 17<24hours, 5>24hours. 1 required transfusion. VAS pain scores average 1.6 (zero to 6).

Conclusions

vNOTES is a safe and effective route for performing hysterectomy with high patient satisfaction and low pain scores. Length of stay is complex and will be explored

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Review of post-operative morbidity, recurrence and mortality rates for surgeries performed on squamous cell carcinoma (SCC) of the vulva in East Kent Gynaecological Oncology Centre (EKGOC)

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Aims

To compare surgery related morbidities, disease recurrence and mortality rates in patients with SCC vulval cancers <4cm diameter, with regards Sentinel Lymph Node Biopsy (SLNB), Inguinofemoral Lymphadenectomy (IFL) or radiological nodal assessment only.

Background

According to the GROINSS-V study, omitting groin dissections for early-stage, sentinel lymph-node negative vulval cancer patients is safe, with low groin recurrence rates, excellent survival, and minimal treatment-related morbidities. SLNB was introduced in EKGOC in 2012, with “learning curve” patients undergoing SLNB and IFL.

Methods

Retrospective case review of 262 patients with SCC vulva <4cm with clinically and radiologically negative nodes diagnosed 2005-2020, identified 82 cases undergoing radical surgery as initial treatment where adequate clinical and pathological records were available for inclusion.

Results

Since 2012, SLNB-only procedures have on average contributed to a larger proportion of surgeries performed. These cases had lower post-operative morbidity rates (25%) compared to IFL±SLNB (76%). Of 24 SLNB-only cases (48groins), there were 5 positive sentinel-nodes and only one groin recurrence following negative SLNB suggesting 2% false negative rate. Mortality rate for SLNB-only procedures (17%) compared to IFL±SLNB (29%). 23 patients did not have SLNB or IFL due to patient choice, comorbidities, or other factors.

Conclusions

Patients undergoing SLNB-only procedures had lower post-operative morbidity and mortality rates compared to IFL±SLNBs. The lower mortality rate may relate to case selection of lower risk tumours after 2011.

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Use of the Versius surgical robotic system for robotic assisted hysterectomy.

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Aims

To evaluate the implementation of the Versius surgical robotic system for robotic assisted hysterectomy

Background

Minimal access surgery is widely acknowledged as a standard of care for hysterectomy in gynaecology & gynaecological oncology. Use of the Da Vinci robotic platform is now well established in the UK, however there are now alternative platforms available. The Versius surgical robotic system is the first of these to have gained Medicines and Healthcare products Regulatory Authority (MHRA) approval and has now been adopted in multiple centres across the UK. As part of an All Wales Robotic surgery programme the Versius surgical robotic system is in use in 2 gynaecological oncology centres in Wales.

Methods

Following a national tender process the Versius surgical robotic system was chosen for multi-specialty implementation across Wales. Within gynaecology 2 surgical teams were selected for early adoption. These teams underwent a training pathway of theoretical, simulator & cadaveric training prior to commencing live surgery. A period of proctorship was undertaken prior to independent operating.

Results

Two surgical teams, each consisting of a consultant gynaecological oncology surgeon, a surgical first assistant and 2 surgical scrub practitioners completed training and worked collaboratively during the proctorship & early implementation phase using a 'buddy' surgeon method leading to successful independent operating. In 15 consecutive cases we have had 1 case converted to a laparoscopic procedure and no conversions to an open procedure. In 13 of these 15 cases an advanced energy device was not required. We have had 1 Clavien Dindo level 2 complication which was a readmission for abdominal wall bruising.

Conclusions

Use of the Versius surgical robotic system in gynaecological oncology appears to be a viable, effective and safe alternative to the already widely adopted Da Vinci system. The authors hope that increased competition in the market will drive both innovation & vital affordability.

Introduction of a Versius surgical robotic system into a gynaecological oncology surgical service in a tertiary cancer centre.

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Aims

To implement a robotic service in a tertiary gynaecological oncology centre using the novel Versius surgical robotic system.

Background

Our centre has a well established laparoscopic service. There was no robotic platform in use within gynaecological oncology, or gynaecology in Wales prior to this project.

Methods

Following a national tender process the Versius surgical robotic system was chosen for multi-specialty implementation across Wales. As a team with an established referral pathway across the health board, gynaecological oncology was chosen to commence the robotic surgery service in North Wales. A robotic steering group and a specialty specific implementation group were established. A robotic surgery pathway was agreed and a defined training pathway of theoretical, simulator & cadaveric training was completed prior to commencing live surgery. A period of proctorship was undertaken prior to independent operating.

Results

Two surgical teams, each consisting of a consultant surgeon, a surgical first assistant and 2 surgical scrub practitioners completed training and worked collaboratively during the proctorship & early implementation phase using a 'buddy' surgeon method leading to successful independent operating. Successful implementation took 10 months from decision to independent operating.

Conclusions

Introduction of the Versius surgical robotic system within gynaecological oncology is achievable even for centres which are robotic naive when a collaborative approach is used.

Hepato-pancreatico-biliary support for cytoreduction of advanced ovarian cancer

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Aims

The aim of this study is to review the number of cases and the indications for the involvement of hepato-pancreatico-biliary (HPB) surgery at the time of ovarian cancer cytoreduction.

Background

Complete surgical cytoreduction is the strongest factor predicting long term survival. This frequently requires resection of upper abdominal disease. This can be undertaken by gynae-oncologists, however, there are cases when the assistance of an HPB surgeon is required.

Methods

This study retrospectively analysed 222 patients treated for FIGO stage III and IV ovarian cancer at The Royal Marsden Foundation Trust between 2015-2018. All patients undergoing upper abdominal surgery were reviewed to assess if an HPB surgeon was involved, the procedure(s) performed and any complications.

Results

44 patients (20%) underwent upper abdominal surgery with 22 cases (10%) requiring a joint procedure with an HPB surgeon. Of the 44 cases, 43% required diaphragmatic resection, 25% liver resection, 18% splenectomy, 11% cholecystectomy and 5% pancreatic resection. The majority (73%) of patients had no adverse complications and the median inpatient stay was 9 days. 7% of patients had Clavien-Dindo Grade III complications: 2 patients returned to theatre (peri-splenic bleeding and stomach perforation) and 1 patient required a chest drain. 70% of cases achieved complete cytoreduction (CC-0).

Conclusions

10% of ovarian cancer operations required joint surgery with HPB. In our view, HPB surgery is essential to maximise the rate of complete cytoreduction of advanced stage ovarian cancer.

Endometrial Cancer: Analysing patterns of recurrence and real-life outcome data using the 2020 ESGO-ESTRO-ESP risk stratification system.

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Aims

To evaluate patterns of recurrence and explore the prognostic differences between the 2018 FIGO staging system and the 2020 ESGO-ESTRO-ESP risk stratification system with an emphasis on early-stage disease.

Background

The incidence of endometrial cancer has risen by around 60% since the 90's. It is projected that by 2035 endometrial cancer will be the sixth most common cause of cancer-related death amongst females.

Methods

This was a retrospective cohort study which included patients treated between 2010 and 2017. Primary endpoints were overall survival (OS) and recurrence free survival (RFS). Kaplan-Meier survival analysis was used to assess OS and RFS across different risk groups. Cox proportional hazards regression was used to evaluate prognostic risk factors implicated in recurrence. Different recurrence patterns across the subgroups were analysed with Pearson's chi-square test.

Results

The study included 692 patients with a recurrence rate of 14.9%. The median time to recurrence was 17.1 months (IQR:8.8-28.4). The mean OS varied between 97.2 months in the low-risk group to 63.1 months in the high-risk group ($p<0.001$). Mean RFS was 96.1 in the low-risk group and 58.9 in the high-risk group ($p<0.001$). RFS was predicted by the following factors; high risk group (OR=3.87; $p=0.041$), LVSI (OR=2.54, $p=0.005$), carcinosarcoma (OR=2.20, $p=0.021$) and serous subtype (OR=1.91, $p=0.01$). Logistic regression was used to evaluate risk factors for loco-regional and distant recurrence. Patients in the low-risk group, those with negative LVSI and Grade 1 cancers were less likely to have distant recurrence (OR=0.08, OR=0.34, and OR=0.33, respectively $p<0.05$).

Conclusions

The 2020 ESGO-ESTRO-ESP risk stratification provides accurate estimates of recurrence risk and survival. Those treated in line with current guidance have significantly better outcomes.

The role of gastro-intestinal endoscopy in mucinous ovarian cancer: an analysis of survival rates in a cancer centre.

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Aims

To report on the clinicopathological features and survival rates of mucinous ovarian cancer (MOC) patients in our unit and to investigate the role of gastro-intestinal (GI) endoscopy on the overall survival.

Background

Management of MOC is not well studied, most likely due to the rarity of the disease. It is now well understood that MOC is a disease with completely different clinicopathological characteristics than serous ovarian cancer. Due to its distinct features and the fact that a large percentage of mucinous ovarian cancers are actually metastases from other sites, MOC management can be challenging. Upper and/or lower GI endoscopy is used as a way of identifying metastatic tumours to the ovary, however its value in the overall survival of the patients has not been widely studied.

Methods

Data were retrospectively collected on patients who were operated for MOC of any stage in our cancer centre from April 2008 to October 2017.

Results

43 cases were included in the analysis. 41 women had staging surgical procedures and 2 women had limited surgery due to poor performance status. 14 out of 43 women underwent GI endoscopy. GI cancer was diagnosed in 2 cases during the endoscopy (1 case of gastric cancer and 1 case of bowel cancer). The 5-year overall survival in this study is 62.8%. The 5-year overall survival of the women in the endoscopy and non-endoscopy groups was 60% and 64.3% respectively ($p=0.767$).

Conclusions

The reported survival and recurrence rates, are similar to published studies on the same topic. The difference in the overall survival of the endoscopy versus the non-endoscopy group was not statistically significant.

Prerequisites to improve surgical cytoreduction in FIGO stage III/IV epithelial ovarian cancer and subsequent clinical ramifications

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Background

Improving complete cytoreduction (CC 0) rates without increasing morbidity and no delay in subsequent chemotherapy favors a better outcome in women with advanced epithelial ovarian cancer (EOC). Prerequisites to facilitate this surgical paradigm shift and subsequent ramifications need to be addressed.

Methods

This quality improvement study assessed 559 women with advanced EOC who underwent cytoreductive surgery between January 2014 and December 2019 at a tertiary UK centre. We tested our performance against the 10 quality indicators (QI's) formulated by the European Society of Gynaecologic Oncology (ESGO) to standardize the quality of (maximal effort) cytoreductive surgery in advanced EOC. In 2016, the surgical management paradigm was shifted towards maximal effort surgical cytoreduction. Surgical outcome parameters before (baseline) during (transition), and after (evaluation) this paradigm shift were compared. The primary outcome measure was residual disease (RD).

Results

The CC 0 rates increased from 57.3 to 74.4% after the paradigm shift whilst the peri-operative morbidity and delays in adjuvant chemotherapy were unchanged. The mean OT increased from 133 + 55 to 197 + 85 minutes. The subsequent mean LOS increased from 7.0 + 2.6 to 8.4 + 4.9 days. The ESGO QI score improved from 27 for the baseline years to 34 and 34 for the transition and evaluation years, respectively.

Conclusions

Improving CC 0 rates without compromising morbidity in advanced EOC is feasible. Maximal effort cytoreductive surgery should solely be carried out in high output tertiary referral centers due to the associated substantial prerequisites and ramifications.

Defining the non-surgical advanced ovarian cancer population - West of Scotland experience

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Aims

To describe a cohort of non-surgical ovarian cancer patients and their outcomes.

Background

Debulking surgery improves overall survival (OS) in advanced ovarian cancer however 35% of patients in our centre do not have surgery.

Methods

Clinicopathological characteristics were documented for consecutive ovarian cancer patients who did not undergo debulking surgery between 2013 and 2017 in the West of Scotland.

Results

288 patients were identified. The median age at diagnosis was 75.5yrs (30-97). 70% presented as an emergency admission. 60% had a performance status (PS) of 2 or poorer. 95.5% were stage 3C or higher with 87.5% having HGS pathology. At MDT, no surgical intent was planned in 173 cases (60%), 106 (37%) were initially planned for delayed primary surgery and primary surgery was recommended for 9 patients (4 underwent an open/close laparotomy, 5 no surgery). Disease extent (62%), poor PS (11.5%) or combination of both (25%) were the reasons for no surgery. 210 patients (73%) attended oncology of which 92% received chemotherapy. 54% of the patients completed planned cycles of chemotherapy with 53% receiving >1 line. At data cut-off, 94% had died with 42 weeks median OS (range 0-293), significantly lower than overall ovarian cancer survival of 2.6 years. Good presentation PS and 1st line chemotherapy completion were associated with longer survival.

Conclusions

This is a heterogeneous patient population who had a mixture of disease and fitness factors that prohibited debulking surgery. Whilst many received multiple lines of chemotherapy, OS is still inferior to surgery, highlighting the urgent need for earlier diagnosis, prehabilitation and greater access to complex surgery for this patient group.

The Malignant Transformation of Endometriosis: Is there a left lateral shift?

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Aims

The primary aim was to determine whether a left lateral predisposition of ovarian clear cell carcinoma (CCC) or endometrioid carcinoma (EC) exists in the malignant transformation of endometriosis. Secondary aims were to determine any pre-operative predictors of the stage of disease.

Background

Globally endometriosis affects approximately 10% of women. Evidence suggests that endometriosis is associated with a 2-3 fold increased risk of developing epithelial ovarian cancer. In Northern Ireland (NI), on average, 22 cases of CCC or EC are diagnosed annually.

Methods

All patients diagnosed with ovarian CCC and EC in NI between March 2011 and June 2018. Data was collected electronically on patient demographics, symptoms, imaging, stage/grade and site of tumour, adjuvant treatment and survival. Statistical analysis performed using on-way ANOVA (predictors of stage), t-test (compare means) and chi-squared (compare observed and external events).

Results

158 patients identified (95 EC, 55 CCC, 8 mixed). 69% presented at stage 1. No significant correlation identified in the mass size or CA125 with stage of disease (mean mass size all stages 13-17cm). 51% of tumours were located on the left and when analysed separately this was significant for EC (P = 0.002) but not for CCC (P = 0.555).

Conclusions

Ovarian EC, compared to CCC, is significantly more likely to develop on the left side which highlights a potential difference in disease pathogenesis. There is no significant association of pre-operative CA125 and mass size on the stage of disease.

An audit of post-operative vault screening following hysterectomy for persistent cervical abnormality

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Background

Hysterectomy may be offered for incompletely excised CIN or CGIN and for persistently abnormal smears, often after multiple excisional treatments. However, studies found that many have persistently abnormal smears following hysterectomy, with rates of VAIN ranging from 5-10%.^{1,2} A systematic review found ongoing abnormalities were detected within the first 2 years following hysterectomy, although included studies predated test of cure (TOC) HPV testing.³

Aims

To evaluate rates of abnormal vault smears in women undergoing hysterectomy for persistent CIN in an era of HPV-testing.

Methods

Retrospective analysis of electronic patient records of women undergoing a hysterectomy for CIN/CGIN at Somerset NHS Foundation Trust between 2015-2020.

Results

We identified 59 women with a median age of 54 years (range 28-72 years). Indication for hysterectomy was: abnormal smear and inadequate colposcopy (30.5%; 18/59); incompletely excised CGIN (16.9%; 10/59); and incompletely excised CIN (22.0%; 13/59). 54.2% (32/59) had two or more excisional treatments prior to hysterectomy. Most (93.2%; 55/59) had a laparoscopic hysterectomy.

CIN or CGIN was found on hysterectomy histology in 18.6% (11/59). At 6 months post-op, 22% (13/59) had an abnormal TOC vault smear, increasing to 25.4% (15/59) at 18 months; six (10.1%) had confirmed VAIN. 38.9% (7/18) of those with a low-grade dyskaryosis prior to hysterectomy had an abnormal smear compared to 23.3% (7/30) with high-grade dyskaryosis ($P = 0.159$).

Conclusions

Rates of proven VAIN were 10.1%. We found no link between grade of referral smear, pre-hysterectomy histology or residual CIN at hysterectomy although our study is limited by size.

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A regional experience of adult granulosa cell tumours: a retrospective cohort study

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Background

Adult granulosa cell tumours (AGCT) of the ovary account for 2-5% of ovarian tumours with 30% in women of childbearing age. They have a good prognosis, although up to 25% recur. There are difficult decisions about management due to a paucity in the literature.

Aims

To review surgical management of AGCT in multiple gynaecological cancer centres.

Methods

Retrospective analysis of electronic patient records from 6 gynaecology cancer centres in South West England between 2000-2021 (n=119).

Results

119 patients with AGCT were identified (no exclusions) - median age 57 years. 91%(n=108) were stage 1 (1a=64/121(53%), 1b=3/121(2%), 1c=39/121(32%)), 5/119(4%) stage 2 and 6/119(5%) patients were stage 3.

71/119 (59%) had TAH/BSO and 19/119 (16%) had BSO. 112/119 (94%) had complete cytoreduction. 10/119 (8%) underwent adjuvant treatment. 19/119 (16%) had fertility-preserving surgery and 3 had a subsequent pregnancy. 19/119 (16%) patients had operative complications; 7/119 (6%) were \geq Clavien-Dindo classification 3.

28/119 (24%) patients had a recurrence; 14% (9/65) stage 1a, 35% (14/40) stage 1c, 40% (2/5) stage 2 and 33.3% (2/6) stage 3. 4/119 (3%) patients had ≥ 4 recurrences. 6/19 (32%) patients with a retained ovary vs 22/100 (22%) patients with no retained ovary had a recurrence. Median follow-up was 5 years (64 months). There were 17 deaths, 8 (44.4%) attributed to progressive disease.

Discussion

Stage $\geq 1b$ had 33.3-40% chance of recurrence compared to only 14% for stage 1a. There was a higher chance of recurrence in patients with a retained ovary. This study is limited by retrospective data collection.

DOES CLOSED INCISION NEGATIVE PRESSURE WOUND THERAPY REDUCE SURGICAL SITE INFECTION IN ENDOMETRIAL CARCINOMA PATIENTS UNDERGOING LAPAROTOMY? A Multicentre Retrospective Cohort Study.

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Aims

The aim of this study is to investigate the rate of surgical site infection in patients with endometrial carcinoma undergoing laparotomy comparing standard dressings against Closed incision negative pressure wound therapy (ciNPWT).

Background

Endometrial cancer is the most common gynaecological cancer in the world, and is partly attributable to obesity. Surgical site infection (SSI) carries high morbidity. ciNPWT has been proposed to reduce wound morbidity, but is more expensive than standard dressings. ciNPWT was introduced in New Zealand in 2017 based on the available evidence from studies on SSI.

Methods

A retrospective analysis of 170 patients who underwent a laparotomy for endometrial carcinoma between 2018-2019 across three hospitals in New Zealand. Dressings were applied according to individual surgeons' preferences.

Results

There were 129 patients in the standard dressing group and 41 patients in the ciNPWT group. The SSI rate was 20.9% in the control group and 34.2% in the ciNPWT group ($P=0.159$). Logistic regression was carried out to account for contributing factors. There was no significant difference in the rate of superficial SSI, the rate of deep SSI was worse in the ciNPWT group (OR 7.19). Wound dehiscence was also worse in the ciNPWT group (OR 4.09).

Conclusions

This study demonstrates no benefit of ciNPWT. It also has shown worse rates of deep SSI and wound dehiscence when ciNPWT was used. More randomised studies are needed.

Oncological outcomes in patients having neoadjuvant chemotherapy who do not undergo intended interval debulking surgery

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Aims

This study aimed to assess and compare the oncological outcomes and survival of patients who did not undergo IDS following NACT for stage III/IV ovarian cancer in Wales.

Background

Patients with advanced FIGO stage III/IV ovarian cancer are commonly treated using neoadjuvant chemotherapy (NACT), interval debulking surgery (IDS), and adjuvant chemotherapy. However, not all patients undergo the intended surgery. Outcome data for these patients is limited and mostly from single-centre studies.

Methods

The Wales Cancer Network identified all patients with stage III/IV ovarian cancer scheduled for NACT across the three Cancer centres in Wales between 2018 and 2019. The Welsh Clinical Portal and CANISC were used to gather data on patients' demographics, treatment approaches, reasons for not having surgery, and oncological outcomes.

Results

197 patients were included. 128 (65%) underwent surgery and 69 (35%) did not. Those undergoing surgery were younger (64.2 vs 70.8 years, $p < 0.0001$), had fewer comorbidities (mean 2.7 vs 3.0, $p = 0.3125$), and lower performance status at diagnosis (mean 0.8 vs 1.5, $p < 0.0001$), but the same mean BMI (28.9), $p = 0.9881$). 89.06%, 67.97%, and 42.99% of patients who underwent IDS survived at 12, 24, and 36 months respectively, compared to 59.42%, 27.54%, and 8.96% who did not ($p < 0.0001$ for all time-points).

Conclusions

35% of women with stage III/IV ovarian cancer did not undergo their intended surgery after NACT. In this retrospective multi-centre cohort, the survival was significantly lower in those who did not have surgery. Common reasons for not proceeding with surgery included disease progression and patient choice.

Characteristics and features of relapse in primary mucinous adenocarcinoma of the ovary: a 12 years review

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Characteristics and features of relapse in primary mucinous adenocarcinoma of the ovary: a 12 years review

Aims

We aimed to assess patient and tumour characteristics and treatment strategies in patients with PMOC who have relapsed, compared to those who have not relapsed.

Background

Primary mucinous ovarian adenocarcinomas (PMOC) are rare tumours accounting for 3% of epithelial ovarian cancers.

Methods

This is a retrospective review of consecutive patients discussed at the Oxford Gynaecological Oncology MDT, who had surgery for PMOC between 2010 and 2022. Data was obtained from electronic records. Statistical analysis was performed using SPSSv29.0.

Results

37 patients were identified. Disease stage distribution (FIGO) was as follows: 28 (76%) stage I, 4 (11%) stage II and 5 (14%) stage III. 24 (65%) patients had expansile tumours, while 13 (35%) had infiltrative tumours. All patients underwent primary surgery. 10 (27%) patients had adjuvant chemotherapy, and this was a gynaecological regime. 8 patients (22%) experienced relapse and 7 (19%) died. Median age was 57 in the group with no relapse and 47 in the group with relapse. The median tumour size was similar in both groups (17.5cm vs. 17cm). Bilateral tumours were more likely to recur (37% in the relapse group vs 3% in the non-relapse group, $p = 0.026$). Recurrence rates were higher for infiltrative tumours (46.1% vs. 8.3%, $p = 0.013$). Of the patients who relapsed, 87.5% were FIGO stage II and above.

Conclusions

Younger age, bilateral ovarian disease, an infiltrative pattern of invasion and FIGO stage II and above are factors associated with recurrence in patients with primary mucinous ovarian adenocarcinomas.

P-134 and BGCS Short

Evaluating the Role of Laparoscopy in Assessing the Feasibility of Ovarian Cancer Cytoreductive Surgery at the South East Wales Gynaecological Oncology Centre

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Aims

The aim of this study was to evaluate the role of laparoscopy in assessing the feasibility of ovarian cancer cytoreductive surgery (CRS).

Background

There is increasing evidence that the patients who ultimately gain the most benefit from ovarian cancer CRS are those with no macroscopic residual disease (R0) at completion of surgery. Laparoscopy may be utilised to assess the extent of intra-abdominal disease and the potential to achieve R0.

Methods

We performed a retrospective review of all patients who underwent laparoscopic assessment to determine the feasibility of CRS over a 5-year period (January 2018 – January 2023). Data were collected on surgical complications, peritoneal carcinomatosis index (PCI), rationale for not proceeding to CRS, residual disease at completion of CRS and survival outcomes.

Results

Thirty-five patients underwent a laparoscopic assessment. The mean age was 63 years. Three patients (8.6%) experienced post-operative complications following laparoscopy. Thirteen patients were deemed suitable for CRS, but two declined. The remaining 22 patients were not suitable for CRS. PCI scores were significantly higher for patients not suitable for CRS (20 vs. 12; $p=0.016$). 10 of 11 (91%) patients who had CRS achieved R0, and 4 patients required colorectal involvement.

Conclusions

This study has demonstrated that laparoscopy can be useful in determining the likelihood of achieving R0 at CRS, without significant surgical morbidity. It may also prevent futile 'open and close' laparotomies.

P-136 and BGCS Short

Interval cytoreductive surgery and hyperthermic intraperitoneal chemotherapy for patients with metastatic ovarian cancer: a single-center experience.

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Interval cytoreductive surgery and hyperthermic intraperitoneal chemotherapy for patients with metastatic ovarian cancer: a single-center experience.

Aims

We present data from the first centre in the UK implementing HIPEC as part of treatment for patients with advanced ovarian cancer undergoing interval cytoreductive surgery.

Background

Emerging data suggest that addition of hyperthermic intraperitoneal chemotherapy (HIPEC) at the time of interval cytoreduction for patients with metastatic ovarian cancer is associated with a survival benefit. However, the implementation of this treatment is affected by concerns related to its potential morbidity.

Methods

This is a prospective study of consecutive patients planned to undergo cytoreductive surgery and HIPEC for advanced ovarian cancer over a 26-month period. All patients had undergone neoadjuvant chemotherapy prior to surgery. Patients with stage III/IV ovarian cancer who underwent complete or near complete cytoreduction (<2.5mm residual disease) received HIPEC using a closed technique.

Results

Cytoreduction to at least less than 2.5 mm residual disease was achieved in 24/25 patients scheduled to undergo surgery and HIPEC. The mean age of the patients was 65±3.1 years. Median PCI score was 8 (range 0-20), while the median number of resected organs per patient was 6 (3-9). The mean operating time was 523±59.5 min. The mean length of hospital stay was 7.7±0.9 days. 8.3% of the patients experienced grade 3/4 complications. There were no deaths within 30-days from the surgery. Age and PCI score were independent predictors of postoperative complications of any grade, while age was the only predictor of prolonged hospital stay.

Conclusions

Interval cytoreductive surgery and HIPEC for patients with advanced ovarian cancer is associated with low perioperative morbidity.

P-137

A retrospective evaluation of surgery for endometrial cancer patients within a single cancer unit

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Aims

A retrospective analysis of Endometrial Cancer (EC) cases in our cancer unit over a 11-year period from 1st April 2011- 31st June 2022.

Background

Advances in minimally invasive surgery (MIS) have increased in recent years. The primary management of EC is surgical intervention.

Methods

Our data was chronologically divided into 4 groups which demonstrated different predominant surgical approach: Group A (open hysterectomy); Group B (transition to laparoscopic surgery); Group C (laparoscopic surgery) and Group D (transition to robotic-assisted surgery). Data collected included age, METS score, procedure, indication, complications, post-op stay and readmissions.

Results

A total of 536 patients were included. The mean age and METS score were similar between 4 groups, 65 (range 62-67) and 7 (range 5-9) respectively. The percentage of minimally invasive procedures increased from 30% (laparoscopic) Group A to 64% (laparoscopic) Group B, 98% (laparoscopic) Group C and 100% (70% laparoscopic) Group D with the introduction of robotic- assisted surgery (n=23/77, 30%). The complication rate was 16% in group A and reduced to 1.3% in group D. The average length of post-op stays measured in days decreased from 5 in group A to 1.7 in group D.

Conclusions

In conclusion, our unit is the first to date to formally evaluate the chronological evolution of surgical approach for endometrial cancer over a 11-year period. Our study proves the adoption of minimally invasive approach has led to drastic improvement in surgical outcomes for patients with endometrial cancer.

Sub-total gastrectomy and Roux-en-Y gastrojejunostomy as part of cytoreduction for advanced and recurrent epithelial ovarian cancer.

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Aims

To demonstrate the feasibility of subtotal gastrectomy as a technique to achieve cytoreduction in advanced or recurrent epithelial ovarian cancer: a case series.

Background

Ultra-radical surgery for ovarian cancer is defined in terms of the procedures necessary for complete macroscopic resection of disease, over and above standard radical surgical techniques. Complete macroscopic resection is necessary in combination with chemotherapy, to maximise progression free survival in both first line recurrent treatment settings. Whilst resection of gastric disease by sleeve gastrectomy for disease that is encroaching on the stomach is well documented, sub-total gastrectomy for discrete metastases in the gastric antrum or distal stomach with gastrojejunostomy for restoration of the continuity of the upper gastro-intestinal tract is uncommon.

Methods

Here we present three cases of subtotal gastrectomy with Roux-en-Y gastro-jejunostomy as part of cytoreductive surgery for advanced or recurrent ovarian cancer.

Results

The first case is that of a 66-years-old woman undergoing interval cytoreductive surgery for FIGO stage 3C high grade serous disease following an initial assessment for primary cytoreduction that was abandoned in favour of neo-adjuvant chemotherapy due to the presence of a pyloric metastatic lesion. The second and third cases are recurrences of known low grade serous cancer in women of 56-years-old and 76-years-old with discrete gastric antral metastatic tumours in the context of oligometastatic recurrence > 3 years since last surgical intervention. All were deemed to be amenable for complete resection on pre-operative investigations. All three patients were discharged for continuation of systemic treatments and remain disease free at follow up intervals of 36-months, 6-months and 3-months, respectively.

Conclusions

Sub-total gastrectomy is useful tool in the arsenal of ultra-radical procedures for advanced and recurrent ovarian cancer in selected patients with an acceptable morbidity profile.

P-140 and BGCS short

SUrgical Route and Pathological risk factors in Early Cervical cancer- Node Positive: (SURPEC-N1): A Retrospective Study

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Aim

To study oncological outcomes in stage 1 cervical cancer (≤ 4 cm tumor size) with positive pelvic nodes with or without radical hysterectomy.

Background

The exact prognosis of clinical stage 1 ≤ 4 cm cervical cancer with positive pelvic nodes on postoperative histology is not well understood. Node positivity without parametrial positivity is not very common in cervical cancer.

Methods

Retrospective analysis of stage I cervical cancer patients with metastatic pelvic lymph nodes detected in frozen section/final histology between January 2012-December 2018 at a tertiary referral cancer centre. Univariate analysis was performed on prognostic factors such as histology, grade, LVSI, route of surgery, type of surgery on disease free survival (DFS) overall survival (OS).

Results: There were 88 patients in the cohort. The median age of the cohort was 48.5 months and median follow-up of 43.35 months. Squamous cell carcinoma was predominant histology (76%) and 63.6% had tumour size > 2 cm. Twenty-one patients (16.7%) had recurrences, out of which nearly two-third with most having distant metastasis (61.9%). Twenty-four patients (27.2%) underwent radical hysterectomy along with pelvic lymph node dissection and 31 patients (35.2%) underwent minimally invasive surgery. Sixty nine patients (78%) completed chemoradiation. The DFS for the cohort is 105.98 months (95% CI 64.96-147.01) and OS is 105.98 months (95% CI 64.96-122.94). On Univariate analysis, squamous cell histology had significantly better prognosis than adenocarcinoma (5 years DFS was 74.8% versus 28.4%, 8 years DFS 62.4% versus 28.4%, $p < 0.001$).

Conclusion

Stage 1 lymph node positive cervical cancer patients have better prognosis compared to lymph node positive stage II/III cervical cancer in published literature.

Clinicopathological and oncological outcomes of borderline mucinous tumours of ovary: A large case series

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Aim

To study the clinicopathological factors and oncological outcomes of mucinous borderline ovarian tumours (MBOT) registered and treated at a large tertiary referral cancer centre.

Introduction/background

There is an overlap in presentation and behaviour between (MBOT), serous borderline ovarian tumours and also metastatic mucinous tumours of GI tract causing difficulty in diagnosis and management. Current literature on MBOT is scarce.

Methods

Retrospective analysis of patients with MBOT registered at Tata Memorial Hospital, Mumbai, India from 2017-2019.

Results

Seventy-five patients were included during the study period. Median age of presentation is 39.3 years and median follow up is 24 months. Only 15 (20%) patients were postmenopausal. Seventy patients (93.3%) had disease confined to ovary out of which 5 patients had capsular breach or positive cytology. Five patients (6.6%) had > stage 1 disease. Thirty-six patients (48%) had fertility sparing surgery. Appendicectomy was done in 6 patients (8.1%). Nine patients (12%) were given chemotherapy. Eleven patients (14.9%) had recurrences, out of which 7 (9.46%) were in peritoneum and 4 (5.4%) were in ovary. All patients who presented with advanced stage had non salvageable recurrence. The 2 and 5 year disease free survival (DFS) was 86.1% and 79.6% respectively whereas 2 and 5 year overall survival (OS) was 98.6% and 83.9% respectively.

Conclusion

The excellent prognosis of stage I MBOT is in stark contrast to dismal outcomes in advanced stages. Further evaluation of disease biology and novel treatment modalities needs to be explored in future for better management of advanced MBOT.

15 years of robot-assisted laparoscopy for high-risk endometrial cancer: experiences of a high-volume centre.

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Introduction

The Royal Marsden Hospital is a tertiary cancer centre treating primary endometrial cancer patients with robot-assisted surgery (RAL). We aimed to describe our experience in RAL since the introduction in 2007 for women with endometrial cancer and compare our outcomes with other cohorts.

Methods

All patients who received RAL for endometrial cancer at the Royal Marsden Hospital consecutively between 2007 and 2022 were included. Patient data was prospectively collected in a secured database. Pearson's chi-squared and univariate logistic regression analysis was performed to assess the association between variables and perioperative outcomes.

Results

554 cases were analysed. Compared to 3 other cohorts our cohort has a similar median age (67 years), BMI (31 kg/m²) and ASA performance status (2), but a higher rate of grade 3 tumours (47.5%), stage III disease (21.7%) and non-endometrioid tumours (60.3%). Operating time, EBL, length of stay and <30-day return to theatre-rates are comparable to other cohorts. We identified a higher rate of grade 2 Clavien-Dindo complications (20.4%) and conversions (1.8%). No differences in Clavien-Dindo grade 3 or up complications were found. No difference was found between grades or stages for conversion rates. An association between tumour grades and grade 2 Clavien-Dindo complications was found (p-value = 0.011).

Conclusion

In our group of women more high-grade and advanced stage endometrial cancers were seen compared to similar cohorts. The difference in Clavien-Dindo grade 2 complications and conversion rates needs further exploration.

Outcomes of Robotic Surgery in NHS Greater Glasgow and Clyde within Gynae-Oncology

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Aims

Assess the surgical outcomes of patients undergoing robotically assisted hysterectomy within gynaecological oncology in the Glasgow Royal Infirmary.

Background

Robotic surgery (Da Vinci) was adopted in NHS Greater Glasgow and Clyde in April 2021. Since then, over 200 cases have been undertaken for a variety of indications, endometrial cancer being the most common.

Methods

We performed a retrospective case note analysis of 187 patients who had their surgery completed robotically to determine the short- and medium-term surgical outcomes including data on complications.

The following demographic parameters were included for analysis:

Demographics	Outcome Measures
Age	Length of procedure
Deprivation quintile	Length of stay in hospital
BMI	Conversion to laparotomy (including reason)
Performance status/comorbid status	Node count if lymphadenectomy performed
Previous abdominal surgery	Specimen retrieval route (vaginal/abdominal)
Indication for surgery	EBL
Nature of procedure	Pot op pain score
	Post op CRP
	Peri-operative complication (Clavien-Dindo)
	Readmission to hospital following discharge

A separate costing analysis is being conducted and will be reported along with the outcome measures.

Results

The results of this audit demonstrate that robotic surgery is safe and associated with good surgical outcomes, even in the presence of medical or surgical co-morbidity.

Conclusions

We aim to use the reported measures (which we will discuss in detail in this poster) to support a move to same day discharge for carefully selected patients undergoing robotic surgery in the future.

Laterally extended endopelvic resection as part of the of the surgical management of disseminated retroperitoneal leiomyomatosis mimicking low-grade sarcoma in a patient with a solitary kidney.

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Introduction

Leiomyomas are common benign uterine tumours. Rarer subsets can demonstrate aggressive extrauterine growth which may mimic metastatic disease, despite remaining histologically benign. Although surgical excision is the treatment of choice in the literature, there has been limited discussion or research addressing the optimum technique and further surgical complexity associated with aggressive growth, particularly in instances when the diagnosis of benign/malignant disease is unclear.

Case report

Our patient is a 45 year-old female, with an atrophic right kidney, who presented with an increase in abdominal size. CT revealed a grossly enlarged uterus, bilateral paraaortic masses and a pelvic sidewall mass. The complexity of the case was compounded by a tumour residing proximal to the only functioning kidney and engulfment of the inferior mesenteric artery. Pre-operative biopsies could not rule out a low-grade leiomyosarcoma. After careful deliberation on the risks vs benefits of surgical management (including permanent dialysis if the solitary kidney was damaged), an extensive procedure was performed. The patient underwent a radical hysterectomy, laterally extended endopelvic resection to achieve clear margins in the pelvic sidewall, and a left hemicolectomy. Post-operatively, histology confirmed disseminated intravascular leiomyomatosis.

Discussion

We present this challenging case to add to the limited literature documenting the extent of disease spread and to provide clarity into the surgical approach used to achieve complete resection in patients with disseminated leiomyomatosis.

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Gynaecological oncology surgical techniques in complex pelvic surgery and management of intractable pelvic abscesses on a background of severe crohn's disease

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Aims

This report aims to highlight optimum surgical management of the gynaecological sequelae of severe Crohns disease.

Background

Chronic, severe Crohn's disease in a young patient creates surgical complexity with fertility considerations. The rarity of the presentation of intractable pelvic abscesses within this aetiology and their requirement for input from a multi-disciplinary team makes this a vital case in building a consensus for evidence-based surgical management.

Methods

A 29-year-old nulliparous woman was referred to our tertiary centre for surgical management of Crohn's disease with known tubo-ovarian abscess and abdominoperineal sinuses. Her previous surgical history included 4 midline laparotomies, subtotal colectomy and proctectomy with stoma formation and bilateral salpingectomy.

Results

The patient underwent egg collection to preserve fertility. This was followed by midline laparotomy and abdominoperineal resection, which involved an anterior colpotomy and a retrograde modified Hudson hysterectomy, alongside refashioning of the ileostomy. Excision and drainage of the abdominal wall abscess was performed alongside excision of the perineal sinus, with reconstruction of the perineal defect using an internal pudendal artery perforator gluteal fold flap.

Involvement was sought from gynaecological oncology, colorectal, urology, plastics, stoma, fertility, microbiology, and gastroenterology teams which enabled successful preservation of end organ function and improvement in patient psychological wellbeing.

Conclusions

This case is a paradigm of surgical challenge, requiring expert gynaecological oncology techniques including retroperitoneal approach, nerve and vessel sparing considerations alongside colorectal/urological procedures. Moreover we believe that our blueprint for effective multi-disciplinary practice will inform future management of gynaecological surgery.

The surgical, histopathological characteristics, and survival outcome of Ovarian Clear cell carcinoma: A retrospective case series sharing the experience of a tertiary cancer Centre over 10 years

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Objective

Analysis of the clinic-pathological features and survival outcome of patients with OCCC, aiming to identify factors affecting recurrence, progression-free survival and OS.

Design

A retrospective study analysis of medical records of women with OCCC between January 2009 and December 2021 at Churchill Gynecology Oncology cancer center, Oxford.

Methods

Of 227 women diagnosed of non-high grade serous epithelial ovarian cancers, 64 were diagnosed with OCCC during the study period. After applying exclusion criteria, a total of 49 cases were included for this study analysis.

Results

The mean age was 63 years, with 78% post-menopausal. Of the study group, 27 women presented at stage I, 9 women had stage II, 9 women stage III and 4 women had stage IV. NACT was administered to 4 women. All women underwent cytoreductive surgery with no residual disease (R0) in 39 women. Adjuvant chemotherapy was administered in 39 women. In 28 women histology revealed the presence of endometriosis.

The follow-up time ranged between 7-144 months, with mean of 105.5 months, (95%CI 87.25-123.9), with median 53 months. In 10 women with residual, the disease progressed rapidly in all cases. Of the 39 R0, recurrence occurred in 9 women (18.3%), with total 14 deaths during follow up period among the whole cohort.

The 3-year OS was 73.4%, and 3-year PFS was 81.3%, with a mean of 101.7months (95%CI, 84.63-118.93). As expected, women with stage 1 disease had the best outcome. In comparing OS in respect to absence or presence of residual disease, the 3-year OS was 88.6% (95% CI 108.6-141.8), compared to 12.5% (95% CI 4.48-32.11) respectively (P<0.001). The residual disease was linked to advanced stages, and the small number of advanced cases involved in our cohort (13 in total) didn't allow further analysis. In multivariant analysis the variables included were CA 125 (< or >200 IU/ml), Hb (< or >115 g/L), albumin (< or >40 g/L), associated endometriosis, ascites, residual disease, and FIGO staging. FIGO stage was the only independent prognostic indicator of OS with (p<0.05).

Conclusion

Surgery to achieve no residual tumour is necessary to improve the prognosis in advanced OCCC. At present, the true challenge is to predict which patients with early-stage disease are at higher risk of

recurrence and would most benefit from adjuvant treatments. International collaboration is essential to power large-scale clinical trials required to answer the many questions regarding the optimal treatment of this disease.

Radical abdomino-pelvic surgery in the management of uterine carcinosarcoma with concomitant para-aortic lymphadenopathy metastasising from anal carcinoma

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Aims

We present a complex case of uterine carcinosarcoma and suspicious para-aortic lymph nodes at the level of the renal vessels, complicated by a previous history of multiple laparotomies and radiotherapy for anal carcinoma.

Background

Successful surgical excision required considerable multidisciplinary teamwork between gynaecology, colorectal and urology surgeons. A 74-year-old woman was referred to gynaecology after a magnetic resonance imaging (MRI) surveillance scan showed evidence of a 45mm endometrial tumour extending into the outer half of the myometrium, and para-aortic lymphadenopathy.

Methods

Following hysteroscopy and biopsy, histopathology confirmed a high grade uterine carcinosarcoma which showed sarcomatous overgrowth and no lymphovascular invasion. In a 10-hour operation, the patient underwent midline laparotomy, with adhesiolysis, ileum resection and side to side anastomosis, posterior exenteration, left kidney mobilisation and suspension, para-aortic lymph node debulking and left ureteric stent insertion.

Results

This case was significant for several reasons: the patient had a history of previous pelvic irradiation that may have caused her uterine cancer, a more radical surgical procedure was required due to her complex medical history, and a multidisciplinary approach was needed to successfully manage extensive adhesions from previous laparotomies and the debulking of the paraaortic lymph nodes around the renal vessels.

Conclusions

This case demonstrates the importance of multidisciplinary teamwork in complex pelvic surgery and the vitality of good communication between colleagues from multiple specialities in achieving safe and effective patient care.

MANAGEMENT OF LATE PRESENTATION OF ADVANCED CERVICAL NEOPLASIA IN PREGNANCY DURING THE COVID-19 PANDEMIC – AN ETHICAL DILEMMA

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Aims

Holistic care is found at the heart of every oncology patient's journey, but perhaps nowhere more pivotal than in the case of concurrent pregnancy. We present this rare case in recognition of the onerous effect of the covid-19 pandemic with a focus on the emotional burden of such difficult circumstances.

Background

A 33-year-old primiparous female attended at 16 weeks pregnant with vaginal spotting and abnormal cervix on inspection; her smear test had been delayed due to COVID-19. Investigations revealed a stage 2b squamous cell cervical carcinoma.

Methods

Proposed management options were of pregnancy continuation with neoadjuvant chemotherapy and elective preterm caesarean section or surgical termination; both followed by chemoradiotherapy. Following fertility counselling, the patient underwent surgical peripartum fetocidal type III nerve sparing radical Wertheim hysterectomy and pelvic lymphadenectomy.

Results

Findings were of a 5cm exophytic tumour with a 3cm and 5cm margin of vaginal cuff and parametrium respectively. The couple were subsequently referred on to clinical oncology and for bereavement counselling, mourning the loss of their future fertility over and above that of their unborn baby.

Conclusions

Throughout this patient's journey there was not only a host of support including cancer nurse specialist teams; but also in consideration of the clinicians residing over this patient's case. The provision of compassionate care was coupled alongside that of emotionally supporting colleagues within the multidisciplinary team. This case raised significant ethical dilemmas regarding aspects of clinical management with extremely difficult and heartfelt decision-making challenges, which greater emphasised the present loss of life.

Appendiceal tumour mimicking ovarian malignancy: when to think outside the box

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Aims

A clinical case of appendiceal mucinous neoplasm initially mimicking ovarian malignancy. It illustrates the diagnostic process for rarer non-gynaecological malignancies that may be encountered in gynae-oncology.

Background

Appendiceal mucinous neoplasms are often misdiagnosed due to presenting symptoms like those of appendicitis or more common retroperitoneal malignancies. This case was an uncommon presentation to gynae-oncology clinic with vague symptoms. Notably, there were ambiguities from the initial investigations, which were indicative of an ovarian malignancy, and thus complicated the diagnostic thinking.

Methods

The case is presented through a series of annotated clinical images: radiology, surgical pictures, and histopathology.

Results

Radiological imaging and tumour markers (normal CEA (3.3 micrograms) and CA19-9 (3U), and raised CA-125 (91 IU/ml)) were suggestive of ovarian malignancy. Surgical pictures then taken during exploratory laparoscopy showed a complex tubo-ovarian appendicular mass. Finally, after a joint gynae-oncological and colorectal operation, clear margins were achieved of the mass with no residual disease. Histopathological diagnosis confirmed a low-grade appendiceal mucinous neoplasm, with incidental adenocarcinoma at the ileocaecal valve. The patient has recovered fully with no relapse of symptoms a year post-operation, and they will have annual CT scans, tumour markers surveillance, and 5-yearly colonoscopy.

Conclusions

This case demonstrates that a shared clinical decision-making process is crucial to a joint specialties approach to diagnosis and surgical intervention. This is particularly pertinent for the accurate and timely diagnosis and treatment of rarer malignancies, as well as ensuring other incidental findings are not missed, as could have been the case for this patient.

Is same-day discharge after total robotic hysterectomies feasible in the UK? A monocentric retrospective cohort study

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Aims

To determine the safety and cost-effectiveness of same day discharge (SDD) after total robotic hysterectomy (TRH).

Background

SDD is associated with similar outcomes to postoperative admission after total robotic hysterectomy (TRH) (1). It has also been shown to be cheaper than laparoscopic hysterectomy within a robotic centre in the UK (2). With this evidence SDD after robotic surgery has become common practice in the United States (US) (1).

Methods

This is a retrospective cohort study of 91 TRHs performed between 08/09/2021 and 28/12/2022. Perioperative variables were collected from the hospital's electronic patient records. Cases were divided into SDD (n=16) and admitted patients (n=75). Categorical variables were compared using Chi Square tests and continuous variables using the Mann-Whitney U Test. Binary logistic regression for multivariate analysis. A significance level of 0.05 was used. All statistical tests were performed using IBM SPSS Statistics (Version 29).

Results

Comparing patient demographics, there was no statistical difference in age or BMI (SDD vs admitted): median age (years) = 59 vs 64, $P = 0.143$; median BMI (kg/m^2) = 29.9 vs 31.8, $P = 0.285$. There was a significant difference in hypertension (n=3, 18.8% vs n=29, 38.7%, $P = 0.032$). Significant peri-operative factors were (SDD vs admitted): 30-day complication rate (%) = 0 vs 24.0, $P = .035$; start time = 9:36 vs 13:02, $P = .003$. Only start of procedure $\geq 13:00$ was significant in multivariate analysis. Of the patients admitted postoperatively 58.7% of patients had no medical indicated reason. SDD could save the NHS £2,752.33 per TRH.

Conclusions

This study demonstrates that SDD after TRH is safe and financially beneficial. Contraindications to SDD could include hypertension and late starts to procedures. The benefit of SDD may result in fewer post-operative complications. SDD reduces additional costs of TRH.

Uterine manipulators, a luxury not a necessity: Retrospective single centre study comparing intra-operative outcomes in total robotic hysterectomy (TRH).

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Aims

Our objectives were to determine if use of an intra-uterine manipulator during TRH is associated with inferior perioperative outcomes.

Background

Uterine manipulator use during minimal access surgery (MAS) for early endometrial cancer has been scrutinised for its possible influence on peritoneal contamination and lymphovascular space invasion. This concern was similarly highlighted following evidence that MAS is associated with inferior oncological outcomes to open surgery in early cervical cancer.

Methods

Retrospective study of all TRHs performed at a single cancer centre between 01/02/22 and 31/12/22. Patient variables and intra-operative outcomes were compared against the use of a uterine manipulator.

Results

73 cases were identified, 51 used Clear-view uterine manipulator and/or McCartney tube (group M) whilst 22 did not (group nM). There was no difference between patient characteristics: age (M= 59y (30-86y), nM = 63y (40-91y), p= 0.378), menopause status (p=0.780) , parity (p=0.113) and BMI (M median 32.3kgm² (19-55.7 kgm²), nM median 27.4 kgm² (16.2-58.5 kgm²), p=0.458. Size of uterus was also comparable: transverse dimension (M median 5.6cm (4.4-13cm, nM median 6cm (3.5-11cm),p=0.485) and anteroposterior dimension (M median 4.9cm (2.3-10cm), nM median 6cm (2.5-10.5cm)), p=0.414. There was no difference in length of console time (M median= 140mins (range 66-370mins), nM median 147.5 mins (range 75-315mins) p= 0.6501 and no difference in complications (p=0.471).

Conclusions

We demonstrate that TRH without uterine manipulation is feasible and safe technique and has been adopted within a relatively new robotic service. Furthermore, this technique saves on the cost of a manipulator (vCARE- £40, Clearview £70, McCartney tube £199.54, Rumi + Ally arm £207.40/use) and of a second assistant (based on an average SHO salary- £19.40/h).