

BGCS 2022 BOOK OF ABSTRACTS

Explainable Artificial Intelligence for prediction of complete surgical cytoreduction in advanced stage epithelial ovarian cancer

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SESSION D - BGCS SHORT, Great Hall, July 7, 2022, 16:00 - 17:00

Aims

To develop an AI-based predictive model for the outcome of complete cytoreduction (CC0) in advanced stage epithelial ovarian cancer (EOC) and apply a methodology to explain the prediction by analyzing feature interactions.

Background

Complete surgical cytoreduction is the single most important prognosticator in EOC. Explainable Artificial Intelligence (XAI) could clarify the influence of static and real-time features on the CCO resection prediction.

Methods

We retrospectively evaluated 571 consecutive advanced stage EOC patients who underwent cytoreductive surgery. An eXtreme Gradient Boosting (XGBoost) algorithm was employed to develop the predictive model including mostly patient- and surgery-specific variables. The Shapley Additive explanations (SHAP) framework was used to provide global and local explainability of the predictive model.

Results

The XGBoost accurately predicted CCO (area under curve [AUC]=0.866; 95% confidence interval [CI]=0.8-0.93. We identified "turning points" that increased the probability of CCO including Intraoperative Mapping of Ovarian Cancer Score and Peritoneal Carcinomatosis Index <4 and <5 respectively, followed by Surgical Complexity Score >4, patient's age <60 years, and largest tumor deposit <5 cm in a surgical environment of optimized infrastructural support.

Conclusions

We demonstrated high model accuracy for the CCO prediction in advanced stage EOC patients and provided novel global and local feature explainability that can be used for quality control and internal audit.

Cost-effectiveness of unselected multigene germline and somatic genetic testing for epithelial ovarian cancer

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Aims

To estimate cost-effectiveness and population-impact of parallel panel germline and somatic *BRCA*-testing for all OC-patients, incorporating PARP-i therapy, compared with family-history(FH)/clinical-criteria based germline (*BRCA*)-testing.

Background

Offering parallel panel-germline and somatic-testing to all women with ovarian cancer (OC) identifies more patients with pathogenic-variants benefitting from poly-ADP-ribose inhibitor (PARP-i) therapy, and unaffected relatives for precision prevention.

Methods

Data obtained from 2,391 unselected population-based OC-patients recruited to research studies in the UK (1,483 women) and USA (908 women). Microsimulation cost-effectiveness model built to compare lifetime costs-&-effects of germline and somatic *BRCA*-testing for all unselected OC-cases (Strategy-A) with FH/clinical-criteria based germline *BRCA*-testing (Strategy-B). We also evaluate cost-effectiveness of germline-panel testing alone (without PARP-i).

Results

Compared with clinical-criteria/FH-based *BRCA*-testing, *BRCA1/BRCA2/RAD51C/RAD51D/BRIP1* (panel) germline-testing and *BRCA1/BRCA2* somatic-testing for all OC patients with PARP-i therapy has a UK-ICER=£42,433/QALY, USA-ICER= \$145,071/QALY, higher than cost-effectiveness thresholds. Strategy-A becomes cost-effective if PARP-i costs fall by 32%, or overall survival with PARP-i reaches HR=0.28. Unselected panel-germline testing (without PARP-i) is extremely cost-effective with ICER=£11,291/QALY or \$68,808/QALY. One year's unselected testing could prevent 198 BC/OC-cases and 236 deaths in the UK; and 523 BC/OC-cases and 581 deaths in the USA.

Conclusions

Unselected panel-germline and somatic *BRCA*-testing is currently not cost-effective but becomes cost-effective if PARP-i costs fall by 32% or overall-survival reaches a HR=0.28. Unselected panel-germline testing alone is highly cost-effective. Guidelines should be changed to reflect a panel-germline testing approach.

Urine high risk human papillomavirus testing as an alternative to routine cervical screening strategy: the ACES Colposcopy Study

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Aims

The aim of the <u>A</u>lternative <u>CE</u>rvical <u>S</u>creening (ACES) study was to compare the sensitivity of matched urine and cervical samples for high-risk human papillomavirus (hr-HPV) testing for CIN2+ detection using two urine collection devices.

Background

Testing urine for hr-HPV may be an attractive option for non-attenders of cervical screening. We hypothesised that Colli-Pee®-collected urine has better sensitivity than standard pot-collected urine through reliable first-void collection, standardisation of volume collected, and immediate preservative-fixation.

Methods

Colposcopy attendees (Manchester,UK) with abnormal cervical screening results were randomised (1:1) to Colli-Pee (10mls+preservative) or standard pot for urine collection. Urine and matched cervical samples were taken immediately prior to colposcopy; hr-HPV testing used Roche Cobas 8800. Colposcopy and/or histology informed diagnosis. 480 participants (120 CIN2+/group) would have 89.8% power to establish a sensitivity of urine for CIN2+ detection >80%.

Results

324 participants were included in this interim analysis (Colli-Pee n=162, pot n=162; full data end March 2022). The groups were balanced in age (median 35.6 vs 35.8 years), ethnicity (77% vs 81% White) and referral screening results (n=74 vs n=73 high grade) in Colli-Pee and pot arms, respectively. Cervical hr-HPV was 96.6% sensitive (95%CI 92.2-98.9%) for CIN2+ detection (n=141/146). Urine hr-HPV sensitivity for CIN2+ was higher using Colli-pee (95.5%, 95%CI 87.5-99.1%, n=63/67) than the standard pot (75.0%, 95%CI 64.1-84.1%, n=60/80, p<0.001).

Conclusions

Hr-HPV tested Colli-Pee-collected urine shows similar sensitivity for CIN2+ detection to routine cervical screening. Further work in the cervical screening population will establish its specificity and its potential to improve uptake in current non-attenders.

The Early Detection of vulval CAncer Through self-Examination (EDuCATE) study: What women and clinicians think.

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Aims

To explore the practice, facilitators and barriers of vulval self-examination in women at increased risk of vulval cancer.

Background

Rates of vulval cancer are increasing globally. Early detection reduces surgical morbidity and prolongs survival. Although population screening has no role, vulval self-examination may prompt early diagnosis in high-risk women. UK guidance promotes self-examination in women with high-risk vulval conditions, but there is a lack of evidence about practice, acceptability and barriers.

Methods

Clinician questionnaires were completed at a British vulval conference. Patient questionnaires were distributed through patient networks and clinics. Patient and clinician focus groups analysed thematically explored barriers and facilitators of self-examination(n=28).

Results

All ninety-eight clinicians agreed that self-examination plays an important role in detecting sinister vulval changes in high-risk women. 87% recommended monthly self-examination and 81% provided one-to-one teaching.

455 patients(median age 58 years) with lichen sclerosus(69%), lichen planus(13%), vulval cancer(14%) and VIN(13%) participated. Clinic respondents(n=197) were older(median 65 years vs 52 years, p<0.001) and 65% reported self-examining compared with 86% of online respondents(p<0.001). Despite regular self-examination, 40% were not confident about recognising vulval abnormalities. Barriers to self-examination were lack of awareness(38%), confidence(31%) and physical difficulties visualising the vulva(32%). Face-to-face specialist teaching was regarded as the best facilitator.

Conclusions

Patients and specialist vulval clinicians recognise that vulval self-examination is important in early detection of vulval cancer, but a lack of formal teaching impairs confidence in the identification of abnormalities.

Carboplatin monotherapy (C) versus carboplatin-paclitaxel (CP) in frail elderly epithelial ovarian cancer (OC) patients

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Aims

To compare survival/toxicity outcomes with 3-weekly C (3wC) and 3wCP in frail elderly OC patients.

Background

OC is often treated with 3wC rather than CP in frail elderly patients. Elderly Women with OC (EWOC)-1 trial demonstrated that 3wC achieved worse survival outcomes and increased toxicity than CP (3wCP or 3wC with weekly paclitaxel (3wC1wP)) in frail patients, ≥70yo, FIGO stage III/IV OC.

Methods

Clinical data was retrospectively analysed for newly-diagnosed, stage III/IV, ≥70yo OC patients, treated with 3wC or 3wCP at two cancer centres. Charlson-Comorbidity Index (CCI) and ECOG performance status (PS) assessed frailty. CTCAEv5.0 graded toxicity.

Results

107 patients were treated with 3wCP (n=76 including 2 3wC1wP) or 3wC (n=31). 3wC cohort was older with more comorbidities than 3wCP (median 83yo vs. 75yo (p<0.001), median CCI 4 vs. 3 (p<0.001)). While 3wCP achieved better OS/PFS than 3wC (36.5 vs. 22.3mo, p<0.01; 18.4 vs. 13.7mo, p<0.01 respectively), this was not significant (p>0.05) when controlled for age, stage, PS, CCI, and surgical outcome. Haematological \geq grade 3 (G3) toxicity was similar (63% 3wCP, 54% 3wC), with \geq G3 neutropenia (p=0.019) and all-grade neuropathy (p<0.001) more common with 3wCP. G3/4 thrombocytopenia was more prevalent with 3wC (p=0.006).

Conclusions

Despite limitations of this retrospective analysis, like EWOC-1 data combination therapy was well-tolerated and should be considered in frail older patients. There is a trend towards improved outcomes with 3wCP. Although toxicity profiles differ between regimens, G3/4 toxicity rates are comparable.

Cytoreductive surgery (CRS) for advanced ovarian cancer (AOC) in Leicester: Benefits of a paradigm shift in surgical approach in 2015.

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Aims

To analyze the implementation of a paradigm shift in the surgical management of women with AOC at the University Hospitals of Leicester NHS Trust (UHL) in 2015, until 2020, compared to 2011-2014.

Background

Surgery for AOC has evolved over the past decade to ingeminate the need to offer maximum effort surgery (MES) with the aim of complete cytoreduction (R0 resection), to improve survival.

Methods

Retrospective cohort study of women with AOC who underwent CRS. The two groups were: 153 women from January 2011 to December 2014 (group 1), 136 women from January 2015 to January 2020 (group 2).

Results

In group 1, the 1 year, 3 years and 5 years overall survival rates (OS) were, 90.4%, 33.7% and 19.3%, compared to 90.2%, 55.4% and 29.7%, respectively, in group 2 (p=0.012).

Significantly more women had CRS in group 2: 45 - Primary surgery (PDS) and 57 - interval surgery (IDS) vs. 17 - PDS & 67 - IDS in group 1 (P<0.001).

Surgical complexity score (modified Aletti score) was higher in group 2 compared to group 1 (p=<0.001). No significant difference was noted in the postoperative complications, in group 2, in women who underwent PDS vs. IDS, although PDS was associated with higher OS.

Conclusions

MES/CRS in women with AOC significantly improves OS. Our data highlights the importance of a dedicated team to implement this change in cancer centres treating AOC.

MIRRORS Study: A Prospective Cohort Study assessing the feasibility of robotic interval cytoreductive surgery for advanced-stage ovarian cancer

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Aims

Establish the feasibility and safety of a proposed randomised controlled trial (RCT) of robotic interval cytoreductive surgery (CRS) for advanced ovarian, fallopian tube and peritoneal cancer (EOC) using MIRRORS-protocol.

Background

MIRRORS (Minimally Invasive Robotic surgery, Role in optimal debulking Ovarian cancer, Recovery & Survival) is the largest prospective cohort study of robotic interval CRS in women with advanced-stage epithelial ovarian cancer to date. MIRRORS has investigated the feasibility of consenting, the acceptability and success of robotic interval CRS and its impact on short-term surgical outcomes and quality of life.

Methods

Eligibility: Women with Stage IIIc-IVb EOC undergoing neoadjuvant chemotherapy, suitable for interval CRS with a pelvic mass ≤8cm. Robot-assisted laparoscopic assessment proceeding to robotic/open interval CRS (MIRRORS protocol). 6-month post-op surveillance.

Results

Recruitment: 23/24 eligible women(95.83%). Following MIRRORS-protocol, completed 20 robotic, 3 open interval CRS. All patients achieved CRS to R<1, robotic: R0 =47.4%, open R0 =0.0%. Conversion rate to open: 0.0%. Median estimated blood loss robotic: 50ml, open: 2026ml; length of stay 1.5 days robotic vs 6 days open, time to chemotherapy robotic: 18.5 days vs open: 25 days. 6 month OS and PFS are non-inferior compared with concurrent and retrospective control groups.

Conclusions

Robotic interval CRS is safe and feasible in women with a pelvic mass up to 8cm. A prospective RCT is required to assess whether patients undergoing MIRRORS-protocol have non-inferior overall-survival compared to open interval CRS.

The prognostic value of serum CA125 and HE4 for endometrial cancer: can serum biomarkers improve risk stratification within molecular subgroups?

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Background

Cancer antigen-125 (CA125) and human epididymis-4 (HE4) show promise as endometrial cancer prognostic markers.

Objective

To evaluate the association between serum CA125, HE4 and endometrial cancer survival outcomes when tumours are stratified according to molecular subgroup.

Method

In this prospective study of endometrial cancer patients, pre-treatment serum CA125 and HE4 levels were measured and tumours classified as *POLE*-mutant, p53-abnormal, MMR-deficient or no specific molecular profile (NSMP) according to TransPORTEC classifiers. The relationship between biomarkers and survival was evaluated using Kaplan-Meier analysis and multivariable cox regression adjusted for known prognostic markers.

Results

Overall, 333 women were included with *POLE* status available for 220. Tumours were *POLE*-mutant (n=10, 5%), p53-abnormal (n=24, 11%), MMR-deficient (n=67, 30%) and NSMP (n=119, 54%). Median follow up was 44 months (27-59), during which 42 (13%) recurred and 69 (21%) women died. In the univariable analysis, HE4≥140pmol/L and CA125≥35U/mL were prognostic of survival outcomes, but only CA125 remained prognostic in the multivariable analysis (adjusted HR=2.04 for overall survival, 95%CI 1.16-3.59, p=0.01). When stratified by molecular subgroup, CA125 and HE4 were prognostic of overall survival in MMR-deficient [CA125: aHR=6.01, 95%CI 1.55-23.34, p=0.01 and HE4: aHR=3.75, 95%CI 1.08-13.04, p=0.04] and NSMP groups [CA125: aHR=4.53, 95%CI 1.55-13.33, p=0.006], however, numbers and events were small.

Conclusion

HE4 and CA125 may provide additional prognostic information to risk-stratify those at intermediate risk of recurrence and death. Evaluation in a larger population is required.

A single centre experience in fertility preserving surgery for early stage cervical cancer

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Aims

To establish oncological and fertility outcomes for women undergoing fertility sparing surgery for stage 1a2/1b1 cervical cancer.

Background

Early-stage cervical cancer is increasingly managed with fertility preserving surgery which has been demonstrated to have oncological success and result in successful conception.

Methods

Retrospective analysis of all women undergoing a radical trachelectomy/LLETZ +/- nodes for early stage cervical cancer between 2013-2020 (n=23).

Results

18 (78%) patients underwent a radical trachelectomy and pelvic lymph node dissection (PLND) with 5 (22%) undergoing a LLETZ and PLND. 21 (91%) cases were stage 1a2 or 1B1 and 2 (7%) were upstaged following surgery. 16 (70%) tumours measured less than 2cm in maximum diameter and 17 (74%) were less than 10mm in depth. 3 (13%) received adjuvant chemo-radiotherapy. 2 (9%) had a serious post-operative complication. There was 1 recurrence reported to date and 1 death. There have been 5 pregnancies in 4 women resulting in 4 live births (17%). No significant obstetric complications were described. 6 women (26%) are undergoing fertility investigations with 3 awaiting ART. 2 women (9%) have subsequently had a hysterectomy for benign indication (chronic pelvic pain). 8 women (33%) reported a complication of cervical suture.

Conclusions

Radical trachelectomy is an option for the management of early-stage cervical cancer. Fertility intentions are difficult to establish and a relatively low fecundity rate may not only be due to treatment effects. Defining an evidenced based follow-up package is a priority

Predictors of surgical operability in patients with high grade serous ovarian cancer undergoing neoadjuvant chemotherapy

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Aims

To establish clinical prognostic factors that can predict surgical inoperability after neoadjuvant chemotherapy.

Background

Management of high-grade serous ovarian cancer (HGSOC) normally consists of multiple cycles of neoadjuvant chemotherapy (NACT) followed by interval debulking. Debulking surgery remains the gold standard curative treatment and surgical inoperability is established to be a poor prognostic factor. Additional cycles of NACT and sometimes new regimen is used to achieve operability, but no concrete evidence exist to support this role.

Methods

In this retrospective multi-centre analysis, data were retrieved from electronic healthcare record from four oncology departments across Kent. The specific data collected included patient demographics, clinicopathological and radiological features at diagnosis. Multivariable logistic regression was performed to predict the eventual surgical outcome after three and six cycles of NACT.

Results

236 patients were included in this study where 116 patients received three cycles of NACT and 120 patients received six cycles of NACT. Among age, performance status and FIGO staging at presentation, old age was the only significant predictor of inoperability with an odds ratio of 1.09 (95% CI 1.05 to 1.14, p < 0.001). Notably, a change in NACT regimen from the previous three cycles is not a significant predictor of eventual operability with an odds ratio of 0.41 (95% CI 0.546 to 1.19, p=0.10).

Conclusions

Age was the only significant clinical predictor of surgical operability in HGSOC patients. Currently switching chemotherapy regimen in extended NACT has not shown benefits in achieving operability.

What women say about their experiences of brachytherapy for locally advanced cervical cancer: A qualitative interview study

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Aims

To explore women's experiences of brachytherapy and their views on improvements.

Background

Brachytherapy for gynaecological cancer is reported to cause pain, anxiety and distress with no clear guidance for optimising women's experiences.

Methods

Semi-structured interviews were undertaken with women who received brachytherapy for locally advanced cervical cancer at one of four UK sites. Two cohorts were recruited: cohort one had recently had brachytherapy, cohort two were a year post brachytherapy. Consecutive patients were invited to interview. Participants were invited to retell their brachytherapy story, with views on their care and ideas for improvement also explored. Interviews were audio-recorded, transcribed and data analysed using reflexive thematic analysis (Braun and Clarke, 2019).

Results

Thirty five interviews were conducted (20 cohort one and 15 cohort two). Age ranged from 28 to 87 years. Interview duration ranged from 22 to 78 minutes. Difficult and traumatic experiences were reported, including periods of severe pain and perceptions of poor care. However, some described positive experiences and what went well. Three themes were developed:

- How I got through it
- 1) Unpleasantness, discomfort and the aftermath
- 2) Emotional consequences and trauma

Conclusions

Whilst some women had generally positive experiences, some aspects of care could be improved to minimise difficult and traumatic experiences of brachytherapy. Study insights will inform future work to develop clinical care recommendations.

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Welsh National Ovarian Cancer Audit

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Aims

To establish the disease profile and treatment received by patients in Wales diagnosed with ovarian, fallopian tube or primary peritoneal cancer to match the English feasibility pilot data.

Background

This analysis will enable comparison with the Ovarian Cancer Audit Feasibility Pilot in England and provide vital benchmarking data against which we can measure interventions to improve and standardise care.

Methods

The Wales Cancer Network used the CANISC database to identify all patients diagnosed with ovarian, fallopian tube and primary peritoneal cancer in 2018 and 2019. Data were captured on demographics, stage, treatment approach, duration of hospital stay, complications and chemotherapy cycles received. Data were cross referenced using the Welsh Clinical Portal by teams at each cancer centre and appropriate quality assurance steps were taken

Results

602 patients across Wales were identified. 307 presented with stage III or IV disease. Most common morphological types were high grade serous, mucinous and endometroid cancers at 57.5%, 6.5% and 5.8% respectively. 33.8% of patients received neoadjuvant chemotherapy, 22.3% underwent primary debulking surgery, 12.6% received palliative care. Mean hospital stay post-surgery was 6.8 days. Results of further analysis including variation based on age, stage, tumour morphology, performance status and geographical variation will be available at the time of presentation.

Conclusions

This analysis is the first of its kind investigating the approach to treatment in patients diagnosed with ovarian cancer in Wales. We can use this information to improve care provision and measure the impact of quality improvement initiatives

Outcomes of ovarian transposition in cervical cancer; an updated metaanalysis

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Title

Outcomes of ovarian transposition in cervical cancer; an updated meta-analysis

Aims

To update on our previous meta-analysis of the proportion of women with ovarian function preservation, symptomatic ovarian cysts, and metastases to the transposed ovaries, following ovarian transposition in cervical cancer to further inform current clinical practice.

Background

Cervical cancer is the most common indication for ovarian transposition in reproductive-age women. As women are becoming increasingly aware of their fertility options, it is still uncertain who are likely to benefit from the procedure.

Methods

We conducted a systematic search on Medline, Embase, Web of Science, and The Cochrane Library databases for articles published from January 1980 to July 2021. We computed the summary proportions for ovarian function preservation, non-ovarian cyst formation and no metastases to the transposed ovaries following ovarian transposition by random-effects meta-analysis and we explored heterogeneity by type of radiotherapy.

Results

Thirty articles reporting on 1160 women with cervical cancer, undergoing ovarian transposition were included. For the outcomes of ovarian function preservation, no cyst formation and no metastases to the transposed ovaries, the proportion of women were a) in the surgery only group; 91%, 89%, 99%, respectively b) in the surgery \pm brachytherapy group; 93%, 84%, 99%, respectively c) external beam pelvic radiotherapy \pm brachytherapy \pm surgery group; 61%, 95%, 100%, respectively.

Conclusions

In women with cervical cancer, ovarian transposition offers a significant preservation of the ovarian function, an expected incidence of ovarian cyst formation, and no risk for metastases to the transposed ovaries.

Ovariantissue cryopreservation in ovarian tumours: do they contain normal cortical primordial follicles? A single tertiary centre experience

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Aims

To assess the follicular distribution in ovarian tissue cryopreservation (OTC) samples from patients with ovarian tumours.

Methods

Patients treated for presumed ovarian malignancy between 2017-2021, who were at risk of premature ovarian insufficiency and underwent OTC were identified. Microscopy was carried out in OTC samples, examining for histology and follicular distribution. Follicle distribution in the cortex was recorded.

Results

Nine patients with ovarian tumours underwent concurrent ovarian tissue cryopreservation. Pathological diagnosis included borderline ovarian tumour (2), endometroid ovarian carcinoma (2), immature teratoma (2), yolk sac tumour (1), dermoid cyst (1) and neuroectodermal tumour (1). The primordial follicle count in ovarian cortex test samples was: none (2), 1-2 (3), 50 (1) and 100 (1). In 2 patients follicle count was missing. The two cases with normal follicle distributions were of borderline serous and immature teratoma pathology.

Conclusions

OTC in ovarian tumour patients is rare as there is no international data on this group. It is also not certain that auto-transplantation of the tissue will be possible due to the risk of relapse. A lower primordial follicular distribution is expected in women with ovarian pathology compared with other malignancies. Opportunistic OTC has been carried out in the hope of in vitro maturation of cumulus oophorus complexes in the future. Continuing data collection will enable us to form an algorithm of where opportunistic OTC is feasible in ovarian borderline and malignant tumours.

Outcomes of gynecological cancer surgery during the COVID-19 pandemic: results from the international, multicenter, prospective CovidSurg-GO Cancer study.

Professor Christina Fotopoulou¹, Dr Tabassum Khan², Dr Juraj Bracinik³, Dr James Glasbey⁴, Dr Nadeem Abu-Rustum⁵, Dr Luis Chiva⁶, Professor Anna Fagotti⁷, Professor Keiichi Fujiwara⁸, Dr Rahel Ghebre⁹, Dr Murat Gutelkin¹⁰, Dr Thomas Konney¹¹, Professor Joseph Ng¹², Dr Rene Pareja¹³, Dr Rajkumar Seenivasagam¹⁴, Professor Jalid Sehouli¹⁵, Dr Shylasree Surappa¹⁶, **Dr Elaine Leung²**, **Professor Sudha Sundar²** 1 Department of Surgery and Cancer, Gynecologic Oncology, Imperial College London, UK, London, The United Kingdom, ²Institute of Cancer and Genomic Sciences, University of Birmingham, Birmingham, The United Kingdom, ³Particle Physics Group, School of Physics and Astronomy, University of Birmingham, Birmingham, The United Kingdom, ⁴NIHR Global Health Research Unit on Global Surgery, University of Birmingham, Birmingham, Birmingham, The United Kingdom, 5 Memorial Sloan Kettering Cancer Center , New York, The United States of America, 6 University Clinic of Navarra, Madrid, Spain, ⁷Division Gynecologic Oncology, Fondazione Policlinico Universitario A. Gemelli, Università Cattolica del Sacro Cuore, Rome, Italy, 8 Department of Gynecologic Oncology, Saitama Medical University International Medical Center, Saitama, Japan, ⁹Department of Obstetrics, Gynecology and Women's Health and Masonic Cancer Center, University of Minnesota, Minneapolis, The United States of America, 10 Department of Obstetrics and Gynecology, Division of Gynecologic Oncology, Hacettepe University Faculty of Medicine, Ankara, Turkey, ¹¹Department of Obstetrics and Gynaecology, Komfo Anokye Teaching Hospital, Kumasi, Ghana, ¹²Gynecologic Oncology Department, National University Cancer Institute, , Singapore , ¹³Gynecologic Oncology Unit, National Cancer Institute, Bogotá and Astorga Oncology Clinic, Medellín, Colombia, ¹⁴Department of Surgical Oncology, All India Institute of Medical Sciences Rishikesh, , India, ¹⁵Department of Gynecology with Center of Surgical Oncology, Charité Campus Virchow Klinikum, Berlin, Germany, ¹⁶Tata Memorial Hospital, Mumbai, India

SESSION F - PROFERRED PAPERS, Great Hall, July 8, 2022, 11:30 - 13:00

Aims

To evaluate the changes in care and short-term outcomes of surgical patients with gynecological cancers during the initial phase of the COVID-19 pandemic internationally.

Background

The magnitude of adverse outcomes caused by the disrupted surgical cancer care during the COVID-19 pandemic is unclear.

Methods

A multicenter, international prospective cohort study including consecutive patients with gynecological cancers who were initially planned for non-palliative surgery.

- Primary outcome: 30-day postoperative SARS-CoV-2 infection rate
- Secondary outcomes: 30-day perioperative mortality and morbidity, COVID-19-related treatment modifications.

Results

We included 3973 patients (52 countries; 7 world regions). In 20.7% (823/3973), standard of care was adjusted. Significant delay (>8 weeks) was observed in 11.2% (424/3784), particularly in those with ovarian cancer (213/1355; 15.7%). This delay was associated with a composite of adverse outcomes including disease progression and death (95/424; 22.4% versus 601/3360; 17.9%, p=0.024), compared to those who had operations within 8 weeks of their MDT decisions. One in thirteen did not receive their planned operations (189/2430; 7.9%), in whom 1 in 20 (5/189; 2.7%) died and 1 in 5 (34/189; 18%) experienced disease

progression or death within 3 months of MDT decisions for surgery. Only 22/3778 (0.6%) operated patients acquired perioperative SARS-CoV-2 infections.

Conclusions

One in five surgical patients with gynecological cancer worldwide experienced management modifications during the COVID-19 pandemic. Significant adverse outcomes were observed in those with delayed or cancelled operations- coordinated mitigating strategies are urgently needed.

Urine and vaginal cytology for endometrial cancer detection in symptomatic women

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SESSION F - PROFERRED PAPERS, Great Hall, July 8, 2022, 11:30 - 13:00

Aims

To prospectively validate the diagnostic test accuracy of urine and vaginal cytology for endometrial cancer detection in women with postmenopausal bleeding (PMB).

Background

PMB prompts urgent investigation with sequential invasive and costly tests that can be painful or distressing. A simple, non-invasive test to identify cancer and safely reassure the 95% of healthy women with PMB would transform patient care.

Methods

In this prospective, multicentre diagnostic accuracy study, consecutive eligible women provided a self-collected voided urine sample and a Delphi screener-collected vaginal sample before undergoing routine clinical investigations. Samples were assessed by two independent cytologists blinded to cancer outcomes. Discrepancies were settled by consensus review. Results were compared to standard clinical investigations and hysterectomy histopathology.

Results

Of 1864 participants, 115 (6.17%) had endometrial (n=99) or pelvic malignancies (cervix-7, ovary-3, leiomyosarcoma-2, bladder-1, colorectal-2, metastatic pancreatic-1). The sensitivity and specificity of urogenital cytology for endometrial or any pelvic cancer detection were 80.8% (95%CI: 71.7-88.0%) and 92.6% (95%CI:91.2-93.8%), and 80.0% (95%CI:71.5-86.9%) and 92.6% (95%CI:91.2-93.8%), respectively. The negative predictive value was 98.8% (95%CI:98.2-99.3%) for endometrial cancer detection. Of the 19 endometrial cancers missed by cytology, 2 (10.5%) had high-grade histology and 1 (5.3%) was ≥stage-II, therefore cytology detected 95.8% of aggressive histology and 96.4% of locally advanced/ metastatic cases.

Conclusions

This novel diagnostic test holds great promise. Studies exploring its clinical utility are needed to determine how best to incorporate it into clinical practice to minimise unnecessary invasive tests for women.

Quality-of-life after risk-reducing-surgery for breast and ovarian cancer prevention: systematic review & meta-analysis

<u>Miss Xia Wei</u>, Dr Samuel Oxley¹, Dr Ashwin Kalra, Dr Michail Sideris, Dr Adam Brentnall, Professor Rosa Legood, Professor Ranjit Manchanda

SESSION F - PROFERRED PAPERS, Great Hall, July 8, 2022, 11:30 - 13:00

Aims

Impact of risk-reducing surgery (RRS) for breast (BC) and ovarian-cancer (OC) prevention on quality-of-life (QoL).

Background

The gold standard for OC prevention is risk-reducing-salpingo-oophorectomy (RRSO); early-salpingectomy-delayed-oophorectomy (RRESDO) is an alternative. Risk-reducing-mastectomy (RRM) provides 89% protection against BC. Whilst surgery reduces cancer-risk, there is a reported impact on several QoL outcomes.

Methods

Systematic search of Medline/Embase/Cochrane until December 2021. The population included unaffected women at increased BC/OC risk; Intervention: RRM/RRSO. Our primary outcomes were QoL after RRM/RRSO, comparing across follow-up periods, and menopausal status. We performed a meta-analysis of generic, sexual and menopausal QoL outcomes.

Results

Our search yielded 10,613 citations; 31 studies were included in our qualitative synthesis (4151 women following RRS vs 3905 controls). Most women who underwent RRM were satisfied, and their general QoL was unaffected. Some studies demonstrated a negative impact on sexual-function/body-image. Following RRSO, women had a significant decrease in cancer worry/anxiety, with high satisfaction. Short-term deficits in QoL were reported, but most women returned to baseline after 6-12 months. Most studies found a deterioration in sexual and menopausal symptoms. RRESDO resulted in fewer menopausal symptoms and better sexual function.

Conclusions

RRS is associated with high satisfaction, reducing cancer worry/anxiety. Despite some short-term QoL deficits and menopausal/sexual symptoms after RRSO, these could be mitigated by HRT and subside in the long-term. This study is the first systematic review to provide conclusive data on QoL after RRS, and allows for more informed counselling.

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Distinguishing the molecular profile of endometrial cancer by spectroscopy: A Diagnostic Cross-Sectional Study

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SESSION F - PROFERRED PAPERS, Great Hall, July 8, 2022, 11:30 - 13:00

Aims

• Explore the accuracy of attenuated total reflection – Fourier transform infrared spectroscopy to determine the molecular profile of endometrial cancers

Background

Endometrial cancer (EC) molecular profiling directs treatment which enables some to avoid toxic adjuvant therapy and others to benefit from target immunotherapy. However, molecular profiling takes time and is costly. Therefore, new technologies need to be explored that are less timely and expensive. One potential technology is vibrational spectroscopy.

Methods

In the first instance we assigned EC to the four molecular groups as per the TransPORTEC protocol. To explore how well different aetiologies of mismatch repair deficiency (MMRd) could be identified we subdivided those with MMRd due to somatic path_MMR vs germline path_MMR (Lynch syndrome). Attenuated total reflection – Fourier transform infrared spectroscopy (ATR-FTIR) was used to collect ten spectra from different regions of each tissue section. Principal component quadratic discriminant analysis (PCA-QDA) was performed

Results

In total 314 ECs were included in the analysis. All molecular groups were represented. ATR-FTIR had overall accuracy of 99.1% for the molecular classification of EC.

Furthermore, ATR-FTIR could identify Lynch syndrome associated EC vs EC due to somatic MMR loss with an accuracy, sensitivity, and specificity of 83%, 100% and 75% respectively.

Conclusions

ATR-FTIR generated spectra enabled the accurate identification of EC into the four molecular groups. In addition, it performed well in identifying Lynch syndrome associated EC. These promising findings should be evaluated prospectively in larger studies.

Endometrial Cancer Patient Derived Explants (EC-PDEs) detect differential drug-responses to standard-of-care chemotherapy in the preclinical setting.

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SESSION F - PROFERRED PAPERS, Great Hall, July 8, 2022, 11:30 - 13:00

Aims

To evaluate chemotherapy drug-responses using an EC-PDE model.

Background

Chemotherapy efficacy in endometrial cancer (EC) is low and the ability to predict drug-response in the preclinical setting is desirable.

Methods

EC-PDEs were generated and treated with carboplatin and paclitaxel (CP), carboplatin-alone (C) or paclitaxel-alone (P). Multiplexed immunofluorescence for Ki67 (proliferation), cPARP (apoptosis) and CAM 5.2 (tumour-mask) was performed followed by quantitation of biomarker expression and necrosis area. Response was defined as fold change >2 from control in cell-death (apoptosis and necrosis).

Results

21 EC-PDEs were generated, (17 endometrioid and 4 non-endometrioid). 52.4% (n=11) responded to CP. Of these, dose-response data was available for 9 tumours; 77.8% (n=7) responded at lower concentrations of CP and a clear dose-response relationship was identified in 6 samples. Single-agent responses were evaluated in 14 EC-PDEs. 50% (n=7) responded to CP; of these 57.1% (n=4) responded to carboplatin-alone and 57.1% (n=5) to paclitaxel-alone. 42.9% (n=3) responded to all-three regimens (CP, C and P). Positive correlations were identified between cell-death and advanced stage (r^2 =0.21, p=0.04), grade (r^2 =0.28, p=0.01) and ESGO risk-categorisation of disease (r^2 =0.49, p<0.001).

Conclusions

Patient-specific drug-response data is rapidly obtained within 48h from generation of EC-PDEs from surgical specimens and, if validated, could be utilised to predict individual tumour-response to multiple therapeutic agents enabling treatment personalisation prior to adjuvant therapy. Differences in intra-tumour response data likely reflect tumour heterogeneity and warrant further investigation into mechanisms of chemo-resistance.

Ovarian cancer today and tomorrow: a global assessment by world region and Human Development Index using GLOBOCAN 2020

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SESSION F - PROFERRED PAPERS, Great Hall, July 8, 2022, 11:30 - 13:00

Aims

To provide an overview of the global burden of ovarian cancer using GLOBOCAN 2020 estimates by country, world region, and Human Development Index (HDI) levels, and the predicted future burden by the year 2040 by HDI.

Background

Despite a decreasing trend in incidence of ovarian cancer worldwide, it remains to have relatively poor prognosis particularly in low-resourced settings. It is important to continually examine the burden of ovarian cancer across world regions to identify areas of disparities and reduce its future global burden.

Methods

Age-standardized incidence and mortality rates for ovarian cancer in 185 countries were calculated by country, world region, and for the four-tier HDI. New ovarian cancer cases and deaths were projected for 2040 based on demographic projections.

Results

314,000 new ovarian cancer cases and 207,000 deaths occurred in 2020. There were geographic variations in incidence, with the highest rates in Europe and low rates in Africa. Comparable mortality rates were observed across the four-tier HDI. Our projection for 2040 indicates 96% and 100% increases in new cases and deaths, respectively, in low HDI countries compared to 19% and 28% in high HDI countries.

Conclusions

This study highlights the disproportionate current and future burden of ovarian cancer in countries with lower HDI levels, calling for global action to reduce the burden and inequality of ovarian cancer in access to quality cancer care and treatment.

Modeling the Impact of Reduced Dosing Schedules for HPV vaccination on Time-to-Elimination of Cervical Cancer in the United Kingdom

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SESSION F - PROFERRED PAPERS, Great Hall, July 8, 2022, 11:30 - 13:00

Aims

We propose to analyze the impact that these changes in dosing may have on the UK Department of Health and Social Care's goal to lead the world in time-to-elimination of cervical cancer, as defined by the World Health Organization's Cervical Cancer Elimination Initiative.

Background

In the United Kingdom (UK), a universal HPV vaccination program has been offered to 12–13-year-old girls (since 2008) and boys (since 2019), currently the a 2-dose regimen. The Joint Committee on Vaccination and Immunisation, in late February 2022, proposed off label, interim advice for those under the age of 15 to receive a single dose of the 9-valent vaccine from a 2-dose regimen.

Methods

A mathematical model of HPV infection and cervical cancer (CC) is adapted to the UK's specific context, history of screening, and vaccination. We forecast CC incidence from 2022 and measure time-to-elimination (<4 new CC cases per 100,000 women) under two scenarios: (1) Maintaining the original dosing schedule, and (2) using the reduced dosing schedule, utilizing posterior distributions for degree and duration of protection of the reduced doses derived from available KEN SHE trial (NCT03675256) data.

Results

We present the results as a distribution of time-to-elimination that accounts for the uncertainty in the clinical trial data for the reduced doses of 9-valent HPV vaccines.

Conclusions

An off-label 1-dose regimen will increase and introduce uncertainty in the time to elimination of CC.

Urine steroid profiling as a biomarker tool for detecting mucinous ovarian cancer

Dr David JEEVAN1

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SESSION F - PROFERRED PAPERS, Great Hall, July 8, 2022, 11:30 - 13:00

Aims

To develop a novel approach to detecting epithelial ovarian cancer using urinary steroid profiling by mass spectrometry (MS).

Background

Differentiating malignant, benign and borderline ovarian tumours (BOTs) represents a diagnostic challenge. Perturbations in steroid biosynthesis by ovarian cancers may be a marker for diagnosis. Urinary steroid profiling by MS is a validated tool in the detection of adrenal cancer but its role has not been investigated for ovarian cancer.

Methods

Quantification of 32 steroid metabolites by MS was performed on 24-h urine samples from 184 women (prior to treatment); breakdown: epithelial ovarian cancers and BOTs n=66, benign ovarian tumours n=53, normal ovary n=65. Comparisons were made by linear regression to adjust for age, BMI and CA125. Sub-analysis by histology type was performed.

Results

Steroid profiling revealed 5 steroid metabolites (glucocorticoids and androgens) that were consistently increased (all p<0.05) for mucinous ovarian cancers and mucinous BOTs (n=13, 92% were Stage 1). The highest absolute values for these metabolites were identified in mucinous BOTs.

Conclusions

The panel of metabolites in mucinous BOTs exhibit marked steroid perturbations that suggest steroidogenic dysregulation may play a role in mucinous ovarian carcinogenesis. In contrast, high grade serous ovarian cancer does not demonstrate steroid dysregulation.

The identified metabolites are a potential biomarker that may be able to detect mucinous BOTs and mucinous ovarian carcinomas (prevalence 3%) where diagnosis is challenging. Validation in a larger cohort is required.

Does Magnetic Resonance Imaging following ultrasound scan change the management of adnexal and ovarian cysts in both pre- and post-menopausal women?

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SESSION F - PROFERRED PAPERS, Great Hall, July 8, 2022, 11:30 - 13:00

Aims

To identify whether MRI following USS provides additional information to change the management of ovarian/adnexal cysts

Background

There is currently no clear guidance on the use of MRI following identification of an ovarian or adnexal cyst on USS. In Doncaster and Bassetlaw Teaching Hospitals, MRI is frequently requested to provide further information about ovarian/adnexal cysts.

Methods

A search on the ICE results system identified all female patients who had undergone a MRI pelvis (gynaecology) between 9/2/21 and 9/8/21. Both pre- and post-menopausal non-emergency patients were included. Patients undergoing serial scans for monitoring were excluded. A change in management was defined as resolution of cysts, change of a complex cyst to simple (and vice versa), or identification of possible malignancy.

Results

The search identified 70 patients, 43 pre-menopausal and 27 post-menopausal. The results showed that, in the premenopausal group, the MRI provided additional information or an alternative diagnosis which changed the management in 10/43 (23.3%) cases. In the post-menopausal group, the MRI changed the management in 11/27 (40.7%) cases.

Conclusions

Although this study shows that MRI is beneficial in some cases, a repeat USS should be considered in many. This is particularly relevant to the premenopausal group. A Risk of Malignancy Index (RMI) should be calculated at the time of USS to provide further information and identify a need for further investigation in the postmenopausal group.

Where should gynae oncology outpatient services be located; a service user questionnaire?

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SESSION F - PROFERRED PAPERS, Great Hall, July 8, 2022, 11:30 - 13:00

Aims

To gather views on preferred place of care for a suspected gynaecological cancer.

Background

Delivery of services is often based around historical locations and professional boundaries, rather than designed around the needs of those accessing services. We had an opportunity to re-design service provision and were keen to understand the preferences of those this would most impact.

Methods

We designed an anonymous survey on MS forms to collect information from gynae oncology service users who had experienced a range of services. The invitation was shared electronically and via social media (e.g. Twitter) with the support of gynaecological cancer charities (GO Girls, Peaches and Ovacome)

Results

156 responses were received, 141 of whom had been investigated for gynaecological malignancy. Median age of respondents was 55-60 years. Most (60.4%) had had children. Over half of respondents (53.6%) were either unhappy or very unhappy to be seen within in a general O&G department. A dedicated gynae cancer/colposcopy unit was overwhelmingly the preferred place for care, with 89.4% being happy or very happy with this as their place of care. Free text analysis themes revealed common concerns about colocation of services with maternity services and the need for focus on cancer care.

Conclusions

The overwhelming majority of respondents preferred a dedicated gynaecological cancer unit for investigation and follow up and most were unhappy about co-location with general O&G services.

Ten year review of image guided brachytherapy for the radical treatment of cervix cancer at Royal Devon & Exeter Hospital

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Background

Pelvic external beam radiotherapy (EBRT) with concurrent chemotherapy followed by intrauterine brachytherapy (BT) is internationally accepted as standard treatment for locally advanced carcinoma of the cervix. MRI-based 3D image-guided brachytherapy (IGBT) with dose escalation was introduced in Exeter in 2011 based on RCR and GEC-ESTRO guidance.

Aim

To analyse the outcome of patients over the last ten years.

Method

Patient demographics, treatment details, survival and recurrence data as well as grade 3 and 4 toxicity data was collected on patients who have received brachytherapy between January 2011 and December 2020. Standard treatment 45Gy in 25 fractions +/ - sentinel integrated boost to nodes with concurrent cisplatin and four fractions brachytherapy in 1-2 insertions.

Results

2011-2014 patients: n=74 median follow up 27months, mean EQD2 dose High risk volume (HRV) 89Gy, overall survival (OS)75%, Cancer specific survival (CSS) 69%, local control (LC) 83%, G3-4 toxicity 5%.

Combined intra-cavity interstitial treatment commenced 2016.

2016-2021 patients: n=72, median follow up 23 months, mean EQD2 dose HRV 94GY, OS 83%, CSS 93%, LC 92%, G3-4 toxicity 7%

Discussion

The introduction of combined intra-cavity and interstitial technique has allowed a further dose escalation without significant increase in toxicity. We are currently using a protocol based on EMBRACE 2 with dose escalation to higher risk tumours but a reduction to lower risk tumours. We will continue to monitor our outcomes.

P - 002

Current management practices for endometrial cancer (EC) in the UK: a healthcare professional survey (KNOW-EC)

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Aims

To describe the current management of EC in the UK.

Background

An understanding of real-world practices will help optimise care and ensure services can adapt effectively to new treatments.

Methods

Telephone interviews were conducted in November/December 2021 with UK-based healthcare professionals involved in EC management. Questions were aligned with BGCS/ESMO recommendations, covering the pathway from diagnosis and treatment to follow up.

Results

Sixty-three respondents included medical/clinical oncologists (58.7%), clinical nurse specialists (15.9%), gynaecological oncology surgeons (12.7%) and pathologists (11.1%).

In total, 40.8% 'strongly agreed' that women with low-stage (<Stage II) but high-grade disease should have lymph node biopsy to direct adjuvant therapy. Post-operative imaging was conducted at 36.2% of centres. Hormone receptor status was assessed in 86.2% of centres while 53.4% performed mismatch repair (MMR) immunohistochemistry testing and 39.7% assessed both MMR and micro-satellite instability (MSI). Some biomarker tests were accessed less routinely e.g., *POLE* mutation(8.6%).

Histological type (78.7%) and grade (59.6%) were viewed as relevant treatment response predictors; 17.0% viewed biomarkers as predictive.

Resource barriers (MMR/MSI funding [42.9%]; infusion capacity [22.2%]; pathologist cover [12.7%]) were important practical considerations for immunotherapy adoption and 65.1% of HCPs sought support for managing patients on new therapies.

Conclusions

These findings provide insight into current EC care and highlight potential areas for optimisation (e.g., staging and surgical practices; molecular testing). Addressing practical barriers including resource and educational needs may facilitate swift adoption of new therapeutic options.

P - 003

Evaluation of on-line gynaecological radiotherapy planning meetings using Microsoft® Teams and MedCom ProSoma® virtual simulation radiotherapy planning software

Mrs Helen McCracken¹, Dr Emma Hudson¹, Dr Sheena Lam¹, Dr Amy Case¹, Dr Solly Thomas¹, Ms Jenny Watson¹, **Dr Louise Hanna¹**

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Aims

To evaluate the effectiveness of gynaecological radiotherapy peer review meetings using Microsoft® Teams.

Background

Radiotherapy target volume (RTTV) definition is a key skill in clinical oncology specialty training. Additionally, RTTVs should be systematically peer reviewed. Weekly gynaecological radiotherapy planning meetings (GRPM) were set up in 2018 using ProSoma®, a virtual simulation treatment planning system that allows creation of draft RTTVs which can be modified after review. In July 2020, during the covid-19 pandemic, the meetings moved from face-to-face to on-line using the Microsoft®, Teams virtual platform.

Methods

Retrospective review of GRPM records for one year and survey of core team members.

Results

Data were available for 51 GRPMs. 121 patients were discussed. There was a median of 3 discussions per patient (range 1-11), and in total 440 discussions took place. 83 patients (73%) had their RTTVs contoured initially by a trainee, NMO or both (54 trainee, 32 NMO). 181 target volume contouring and 132 radiotherapy plan approval discussions occurred. 100% of survey responders agreed that Teams is an effective platform for GRPMs, which are supportive, an opportunity for peer review and volume modification, and a learning opportunity.

Conclusions

Virtual simulation software provides a platform for teaching and training, and weekly meetings offer a regular opportunity for peer review. The Teams format with screen-sharing and opportunities for discussion have enabled the meetings to continue despite the covid-19 pandemic. Use of Teams has allowed live simultaneous editing of RTTVs by different team members thereby improving effectiveness of communication and time efficiency.

Impact of the COVID-19 pandemic on vulval cancer referrals to a nonsurgical oncology unit

<u>Dr Claire Bartholomew</u>¹, Dr Emma Hudson¹, Dr Louise Harris¹, <u>Dr Louise Hanna</u>¹

¹Velindre University NHS Trust, Cardiff, United Kingdom

Aims

To assess the impact of the COVID-19 pandemic on referrals of patients with a rare cancer, vulval cancer, to a non-surgical oncology unit.

Background

COVID-19 placed unprecedented strain on cancer services, and it is predicted that the reduction in outpatient and inpatient services will result in an increase in late cancer diagnoses.

Methods

Review of electronic case records of patients referred to the Velindre Cancer Centre (VCC) with vulval cancer over a five-year period (March 2017-February 2022).

Results

During the first four years of the study period there was a median of 9 referrals to VCC (range 6-15), of whom a median of 4 patients received radical (chemo)radiotherapy (range 3-6). In final year of the study period (the second year of the pandemic) there were 16 referrals to VCC. The median age was 70 (range 40-92), 88% had squamous carcinoma and 69% had stage ≥III. Ten patients were referred for radical (chemo)radiotherapy and 1 received adjuvant radiotherapy. Sites of disease included multifocal vulval disease, inguinal and pelvic nodes, rectovaginal septum, anus and rectum, vagina, urethra and bladder, levator ani and pelvic bone tethering.

Conclusions

In keeping with COVID-19 predictions of an increase in late-stage disease, the number of patients with locally advanced vulval cancer referred for radical (chemo)radiotherapy has more than doubled in the last year compared with the previous median. The impact of COVID-19 may negate recent advances in cancer survival and a potential sustained increase in advanced stage disease should be factored into cancer service development.

P - 005

Questionnaire survey of General Practitioners on late effects of pelvic radiotherapy

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Aims

To evaluate General Practitioners' (GP) views and knowledge of potential late side effects of pelvic radiotherapy.

Background

Pelvic radiotherapy is an essential part of the treatment and cure of gynaecological cancers, but it is accompanied by an inherent risk of late side effects of treatment. These can occur months or years after treatment, sometimes after patients have been discharged from oncology follow up.

Methods

Questionnaire survey of GPs attending an oncology educational event.

Results

There were 19 responses (18 GPs and 1 practice nurse). 81% of respondents reported being aware of whether patients have had a previous cancer, although 88% would not be aware if the patient had previously received pelvic radiotherapy. 100% of respondents were aware of potential gastrointestinal and urological late effects of pelvic radiotherapy. For other late effects, awareness was 89% for problems with sex life, infertility and pelvic pain, 79% for leg swelling, 53% for bone fractures, 77% for food intolerances and 31% for changes in weight. 84% of respondents had not had specific training on managing late effects of cancer treatment and 84% felt there is an unmet need for this patient group. 95% expressed that they would like more information on the topic.

Conclusions

The majority of GPs are aware of a patient's previous cancer diagnosis and the potential for long-term side effects but they may be unware of specifics of cancer treatment. There is an unmet need for patients with late effects of pelvic radiotherapy with regard to raising awareness and education.

Setting up a multi-professional Late Effects of Pelvic Radiotherapy Clinic during a pandemic

Ms Alison Wyatt¹, Ms Rachael Edwards², Dr Helen Ludlow², Ms Rhiannon McDonald¹, Mrs Sarah Burton¹, Mrs Tamarha Jones¹, Mrs Frances Brown¹, Ms Diane Rees¹, Ms Kate Baker¹, Dr Emma Hudson¹, <u>Dr Louise</u> Hanna¹

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Aims

To set up and evaluate a novel multi-professional late effects of pelvic radiotherapy clinic and service.

Background

Building on our previous service development on late effects of pelvic radiotherapy, a multi-professional clinic was established in January 2020 in Velindre Cancer Centre, designed to be a patient-centred, holistic clinic that meets the needs of patients on follow-up for gynaecological cancer.

Methods

Service development, data collection and evaluation of the clinic.

Results

The clinic was set up as a face-to-face clinic to evaluate and treat patients, attended by nurse specialists in gynaecological cancer and gastroenterology, a dietician and a specialist physiotherapist. Referred patients were invited to complete a screening questionnaire and were triaged by a Macmillan navigator. During the pandemic, the gastrointestinal and urological consultations were adapted to become virtual (telephone/video). Referrals each month peaked at 11 but fell to 0 or 2 during the pandemic lock-downs. 43.2% of patients needed to see one professional group (23.5% two; 33.3% three or more). An evaluation of service users showed 77% of patients scored 5/5 for overall benefit (15% 4/5; 8% 3/5). Patients attending the clinic commented that they felt listened to and understood. However, 16% of patients did not complete the initial screening questionnaire or did not attend their first appointment.

Conclusions

A multi-professional late effects clinic provides a beneficial, holistic and joined-up approach to patient-centred care. A multi-professional clinic is feasible although it required adaptation due to the pandemic. Reasons for non-engagement with the service should be explored.

The role for personalised brachytherapy treatment in cervical cancer.

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Aims

Review current outcomes following radical chemoradiotherapy for cervical cancer with the view to informing future resource investment.

Methods

A retrospective review of 79 consecutive women treated with external beam radiotherapy (EBRT) and high dose rate brachytherapy for cervical cancer 2017-2019. Data were collected from patient charts and radiotherapy records.

Results

Mean age was 47 years (range 24-78). Most patients had FIGO stage IIB (n=28; 35.4%) or stage IIIC1 (n=23; 29.1%) disease. Nine patients experienced \geq grade 3 bowel toxicity; for seven the mean cumulative (EBRT plus brachytherapy) minimum biologically equivalent dose in 2Gy fractions to the most irradiated 2cc (EQD2 D2cc) of bowel was \geq 65Gy. Sixteen patients (20.3%) developed local and/or distant disease recurrence; three had parametrial involvement (stage IIB), the remainder had locally advanced disease of at least stage IIIB. Mean HRCTV D90 (minimum dose covering 90% of high risk clinical target volume) for patients who developed a recurrence was lower at 84.6Gy (SD 12.1Gy) than mean HRCTV D90 of 96.5Gy (SD 14.5Gy) for patients who did not develop a recurrence. At two years, overall survival was 88% and disease-free survival was 78%.

Conclusions

While outcomes were comparable with international standards, recent technological advances in brachytherapy have the potential to further improve tumour control and reduce toxicity. Patients with locally advanced, bulky disease may benefit from interstitial brachytherapy. Positioning uncertainties could be reduced by *in vivo* dosimetry to monitor radiation dose and radioactive source location in real-time.

Audit of the Pathway for Determining BRCA Mutation Status for Patients with Ovarian Cancer

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Poster, July 7, 2022, 09:00 - 17:00

Aims

- Assess whether patients are being offered genetic testing
- Establish who is taking consent and the time it takes
- Determine whether eligible patients are offered PARP inhibitors

Background

Ovarian cancer is the fourth most common cause of cancer-related death in women. 20% of women with ovarian cancer have a germline or somatic BRCA mutation, which significantly increases the risk of developing ovarian cancer. Patients with stage III/IV disease and a BRCA mutation are eligible for treatment with a PARP inhibitor. Gene carriers should be identified to allow screening of relatives. Hospital clinicians obtain consent for testing and collect samples, which are tested for HRD, somatic and germline BRCA mutations.

Methods

Data was collected for 32 patients seen between September 2019- December 2021. Patients included had diagnoses of high-grade ovarian cancer (serous, clear cell or endometrioid) or endometrial carcinoma. It was determined how many patients were offered testing, time elapsed, and whether patients were referred on.

Results

82.5% of patients were offered testing. Consent was taken in oncology clinics. It took an average of 98 days between consenting and testing. All patients with a genetic mutation were offered PARP inhibitors.

Conclusions

Most patients are being offered genetic testing. There is significant variation in the amount of time taken for patients to receive the test, possibly due to the requirement for patients to book the blood test. Patients with a mutation are being offered the appropriate treatments.

Retrospective review of the intermediate-risk clinical target volume (IR-CTV) for cervix brachytherapy in UHS. Implications for future practice.

Dr Matthew Roberts¹, Mrs Nancy Lewis

¹NHS, Southampton, United Kingdom

Aims

To retrospectively evaluate the dose to the IR-CTV in a series of patients treated with HDR brachytherapy for cervix cancer in UHS, evaluating whether the delivered plans could be retrospectively optimised to the IR-CTV and evaluating implications for prospective practice.

Background

The RetroEMBRACE analysis demonstrated a dose of >85Gy to the high-risk clinical target volume (HR-CTV) D90 confers 86-94% 3-year local control, with IR-CTV D98 of >60Gy conferring similar survival. The IR-CTV corresponds to areas of high-risk microscopic disease but is not routinely delineated in UHS. ICRU 89 recommends reporting its dose.

Methods

Nine patients were selected, treated between 2020-2021. IR-CTV was delineated. Dose delivered was calculated. Plans which did not meet this target were re-planned; optimising to the IR-CTV. Where this was not possible, reasons were identified.

Results

3/9 patients met both the HR-CTV & IR-CTV targets. 3/9 patients met neither, due to tumour bulk. Remaining 3/9 did not meet the IR-CTV target, but on re-planning, were retrospectively optimised. One patient with anterior vaginal wall involvement at diagnosis, optimisation to the IR-CTV was achieved by reconstructing an alternative applicator, allowing for loading of handles.

Conclusions

Future IR-CTV delineation and optimisation should confer local control benefit. However, there is less clinical utility when HR-CTV target is not achievable. Outlining the IR-CTV could have benefited those who have had a good/incomplete response to EBRT. Highlights need to prospectively choose optimal applicator.

QI project – Utilization of Fast track service in gynaecology

Ms Nidhi Sharma¹, Dr Kalpana Ragupathy²

¹University Of Dundee, Dundee, United Kingdom, ²Ninewells Hospital & Medical School Dundee, Dundee, United Kingdom

Aims

To assess appropriateness of referrals to the FTC and to recognize ways to improve efficiency.

Background

Around 21,000 women are diagnosed with gynaecological cancer every year in the UK. In our local cancer unit, the FTC can be accessed in 2 weeks by women with suspicion of cancer that fit the urgent criteria. Unfortunately, when inappropriate referrals are made, patients have high anxiety levels, and the service can become inundated with non-cancer workload.

Methods

Patients who were referred to the FTC between January to June 2021, were identified from outpatient database (Trakare). Data points collected were indications of referral, symptoms, biopsy results and final diagnosis. Validation exercise was carried out based on vetting criteria to assess the appropriateness of each of referrals.

Results

144 patients were included in the study with a suspected diagnosis of gynaecological cancer. Referrals were validated in 43% (n=62). Common reasons for referral were pelvic ultrasound suggesting malignancy (n=30), cervix lesion (n=27), vulva lesion (n=25), pelvic mass (n=19) and ascites(n=3). Further analysis showed that 44% cervix lesion (n=12), 90% pelvic ultrasound suggesting malignancy (n=27), 40% vulva lesion (n=10), 58% pelvic mass (n=11) and 67% ascites(n=2) reasoning were inappropriate.

Conclusions

Our project identified service improvement needs to utilise FTC resources effectively. Few of the services improvements initiated following this project are refining referral criteria, liaison with vetting team, modification of reporting of ovarian masses and flagging of referrals to cancer clinicians where there is uncertainty.

Unexpected Aetiology of a Large Pelvic Mass

Dr Phillip White¹, <u>Dr Monica Tryczynska-Palmer</u>, Mr Kenneth Lim, Dr Aarti Sharma ¹Department of Obstetrics and Gynaecology, University Hospital of Wales, UK

Aims

To describe a rare diagnosis of large B-Cell HIV related lymphoma in a pelvic mass and a review of the literature.

Background

Primary Non Hodgkin's Lymphoma of the female genital tract is rare. Ovarian Non-Hodgkin's Lymphoma accounts for 1.5% of ovarian malignancies and 0.5-1% of Non-Hodgkin's Lymphoma. Ovarian Lymphoma is more common in women over the age 40 years, who present with a pelvic mass or pain. Diffuse large B-cell lymphoma is the most common primary ovarian Non-Hodgkin's Lymphoma.

Methods

A review of patient's case notes and available literature on similar cases.

Results

A nulliparous woman aged 37 years presented with abdominal discomfort, weight loss and unilateral leg swelling. On examination, there was a large, fixed pelvic abdominal mass. A CT scan, ultrasound and MRI showed bilateral solid ovarian tumour masses involving the uterus, sigmoid colon and bladder with suspicious inguinal and axial lymphadenopathy and bilateral hydroureteronephrosis. Pre-operatively, she had bilateral nephrostomies and stenting. A percutaneous biopsy from the mass was inconclusive. She was also coincidentally diagnosed preoperatively with HIV and commenced on anti-retroviral medications post operatively. Surgical intervention with colorectal assistance was undertaken. Surgery was very complex with a total abdominal hysterectomy, bilateral salpingo-oophorectomy, omentectomy, enbloc sigmoid colectomy and Hartman's procedure. There was some residual disease. This patient was managed post operatively with chemotherapy and continued with anti-retroviral treatment.

Conclusions

This case is an unusual presentation of large B-Cell HIV related lymphoma and could be considered in the differential diagnosis of pelvic masses in young women with a HIV diagnosis. The management will include multidisciplinary approach.

Multidisciplinary Mainstreaming of Genomics

Miss Grace Hannington¹, Dr Tracie Miles¹, Dr Axel Walther¹

¹University Hospitals Bristol And Weston, Bristol, United Kingdom

Aims

To develop a multidisciplinary mainstreaming pathway in the Gynae oncology clinic.

Background

Due to evolving genomic knowledge in risk prediction, prevention, research opportunities and treatment pathways in Gynae oncology, it is apparent that genomic testing needs to be part of the diagnostic work up for many in this patient cohort.

Methods

Phase 1 of our program looks at BRCA testing, following the BGCS/BGAP consensus guidelines on testing. A nominated nurse and oncologist worked closely to develop a fit for purpose patient pathway to include multidisciplinary process mapping, patient information needs, whilst cross checking with clinical genetics colleagues.

Results

A Standard Operation Procedure was established, peer reviewed and ratified. Organisation information leaflets created and peer reviewed. Recording of results safeguarded. Plans in progress to put on electronic patient record.

Conclusions

Excellent multidisciplinary support. Intention to audit at quarterly intervals. Positive patient feedback. Planning for Phase 2 to focus on Lynch Syndrome, following first audit.

Endometrial cancer organoids can reliably be used as replicas of primary tumour in endometrial cancer research

<u>Dr Anita Semertzidou</u>¹, Prof Jan Brosens, Dr Richard Williams, Dr Nadia Fernandes, Prof Maria Kyrgiou ¹Imperial College London, , , ²Guy's and St Thomas' NHS Trust, ,

Organoids are increasingly being used as complex, multi-dimensional, multi-cell structures resembling entire organs and have now been derived from a variety of tissues. We established endometrial organoid cultures from pipelle biopsies of 11 patients with endometrial cancer (EC) (7 endometrioid, 3 serous, 1 clear cell) and 3 patients with benign conditions. Organoids were grown in Matrigel and medium supplemented with growth factors, Rspondin-1, Noggin, A83-01 and nicotinamide. The genomic and epigenomic features of organoids and parent tissue were compared in pairs and by histological type using targeted gene sequencing and wholegenome DNA methylation profiling. The genetic variations and mutations in seven genes (PTEN, ARID1A, PIK3CA, POLE, CTNNNB1, KRAS, TP53) were largely shared by primary tumours and EC-derived organoids and exhibited histological type-specific characteristics. Similarly, the DNA methylation fingerprint was preserved in cultured endometrial cancer organoids with only few differentially methylated positions (DMPs) compared to tumour tissue. EC epigenetic profiles were distinct to benign endometrial organoids and clustered together according to histotype.

The functional role of androgen receptor in the endometrial cancer Ishikawa cell line proliferation

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Background

Endometrial cancer (EC) is the fourth most common cancer in women in the UK. While the roles of oestrogen and progesterone have been heavily studied, the role of androgen in the pathogenesis and treatment of EC remains under-investigated. We aim to assess the responsivity of EC Ishikawa cell line to androgen stimulation as a first step in an in-depth investigation of the role of androgen in EC.

Methods

EC Ishikawa cells were divided in 3 arms; untreated cultured in full media, untreated cultured in steroid-depleted media, and cultured in steroid-depleted media supplemented by 10nM of dihydrotestosterone (DHT). Quantitative polymerase chain reaction (qPCR) was performed to assess the change in androgen receptor (AR) expression in response to androgen stimulation and the proliferative impact of androgen stimulation via DHT treatment was studied.

Results

DHT stimulation resulted in a statistically significant decline in the AR mRNA transcript levels compared to the untreated controls. A significant proliferative impact of DHT stimulation was observed at 3nM, 10nM and 30nM doses with optimal treatment duration of 2-3 days. Higher dose of DHT (100nM), on the other hand, showed a paradoxical decline in proliferation.

Conclusion

Our data suggest a proliferative effect of DHT stimulation, with an optimal treatment regimen of 10nM over 2-3 days. We are currently investigating the proliferative effects of androgen stimulation using synthetic androgen. We are also planning to perform RNA-Seq analysis on the EC Ishikawa cells before and after androgen stimulation to identify cell signalling pathways responsible for the observed changes.

A prolonged complete response to checkpoint inhibitor of a patient with MMR proficient, PD-L1 negative metastatic endometrioid endometrial cancer

Dr Maleeha Anwar¹, Dr Rebecca Kristeleit², Dr Emma Hudson³

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Aims

To highlight the need for biomarkers to predict response to ICPI.

Background

Immune Checkpoint inhibitors (ICPI) are available for MMR deficient Endometrial Cancer (EC) but not for MMR proficient cancer.

Methods

A 36 year old para 3 presented with vaginal bleeding. Her diagnosis was protracted and included endometrial ablation and mirena coil for a thickened endometrium. Her symptoms did not resolve and a biopsy confirmed malignancy. She proceeded to TLH and BSO.

Results

The pathology showed a de-differentiated EC with ovarian metastases, FIGO Stage 3A. Her tumour was PAX-8, CK-7 and CA125 positive; WT-1, ER, GATA-3, CK-20 negative. She received adjuvant chemo-radiotherapy to the pelvis but end of treatment CT scan showed recurrent peritoneal disease. She was treated with carboplatin and paclitaxel but tumour burden increased. Following a 3-month treatment break she developed headaches, unsteadiness and cough. An MRI brain confirmed brain metastases. Further investigations revealed lung metastases and a liver lesion. Given the undifferentiated nature of her disease, MMR and PD-L1 status was requested, but treatment with a ICPI was started before the results were available with immediate clinical benefit both to her neurological symptoms and cough. She achieved a complete radiological response in all sites which has been maintained for 3 years with no toxicity.

Conclusions

ICPI are available for patients with MMR deficient EC but other predictive biomarkers are needed to select patients with MMR proficient disease.

Chemotherapy Response Score Prognostic Significance in Patients with Advanced Ovarian High Grade Serous Carcinoma Following Neoadjuvant Chemotherapy and Debulking Surgeries.

<u>Dr Loaie El-Helw^{1,2}</u>, Dr Naima Ikram¹, Dr Kanchana Wickramasinghe¹, Dr Mahrukh Khalid¹, Dr Sharon Costa¹, Dr Rajanee Bhana¹

Aims

We aimed to study the prognostic significance of chemotherapy response score (CRS) in ovarian high grade serous carcinoma (HGSC) patients following neoadjuvant chemotherapy (NACT).

Background

The CRS with either complete (CRS3); partial (CRS2) or minimal (CRS1) has emerged as a histopathological grading system for assessing response following NACT in patients with ovarian HGSC.

Method

That was a retrospective study of 32 similar patients between April 2015 and August 2020.

Results

Minimal chemotherapy risk score (CRS1) was noted in 68.8% and CRS2 in 31.2% of the patients. Complete macroscopic cytoreduction (CMC) was achieved in 65.6% and suboptimal cytoreduction (SCR) in 34.4%.

The median progression free survival (PFS) duration was 22 months for each of CRS1 and CRS2. One-year PFS probability was 90% for CRS2 compared to 68% for CRS1. The median PFS durations were 26 and 11 months for patients with CMC and SCR respectively (p.002).

The median overall survival (OS) duration was 38 months for CRS 2 and 35 months for CRS 1 (p. 400). Two years OS probabilities were 88% and 80% for CRS2 and CRS1 respectively. The median OS durations were 37 versus 25 months for CMC and SCR respectively (p. 098).

Conclusions

Chemotherapy response score has a prognostic significance supporting the need for innovating further adjuvant treatment modalities in patients with inadequate CRS. Complete macroscopic cytoreduction remains the most important prognostic factor.

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Trametinib Use in Low-Grade Serous Ovarian Cancer – A Multi-Centre Experience

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Aims

To compare trametinib with standard of care (SOC) treatments in low-grade serous ovarian cancer (LGSOC).

Introduction

Classically chemotherapy insensitive, >70% LGSOC relapse following first-line treatment. Recently, the MEK inhibitor trametinib showed increased median progression-free (13.0 vs7.2 months) and overall survival (OS;37.6 vs29.2 months) compared with SOC.

Methods

Retrospective evaluation of patient records at two tertiary gynae-oncology centres was conducted. Patients with histologically-confirmed LGSOC, treated with trametinib, were included. Data collected included stage at diagnosis, previous treatments, and details on trametinib use. Efficacy and toxicity (CTCAEV5 grading) data was collected.

Results

14 patients were identified. 85.7% (n=12) underwent surgery for primary/interval/delayed debulking. Preceding trametinib, 92.9% (n=13) patients received platinum-based chemotherapy +/- bevacizumab. 100% (n=14) received letrozole/anti-oestrogens. Patients underwent, on average, 2.5 treatment lines before trametinib. Of the 14, 9 remain on trametinib (median treatment duration 11 months). Regarding best radiological response, 1 patient had complete response (CR), 4 had partial response (PR) and 5 had stable disease (SD). Regarding best CA125 response, 3 patients had CR, 9 had PR and 2 had SD. Clinical benefit rate (CR+PR+SD) for radiological and CA125 responses are 71.4% and 100%, respectively. 92.9% (n=13) patients experienced at least one drug-induced toxicity; 2 patients had grade 3/4 toxicity and 42.9% (n=6) required dose reductions.

Conclusions

Outside of clinical trials, trametinib shows valuable efficacy in LGSOC following first-line treatments. Toxicity is common, but manageable with dose reductions. Hopefully, incorporating trametinib into LGSOC treatment paradigms with translate to improved OS for this historically difficult to treat population.

Bevacizumab-induced pulmonary hypertension: An unusual cause of dyspnoea

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Aims

To present a case of Bevacizumab-induced pulmonary hypertension, and thereby promote clinician awareness.

Background

Bevacizumab is a widely used treatment for advanced gynaecological malignancy, though toxicity can manifest late and atypically.

Methods

A 76-year-old lady diagnosed with stage IIIc high grade serous carcinoma of the fallopian tube underwent complete debulking surgery followed by Carboplatin-Paclitaxel-Bevacizumab x 6 then maintenance Bevacizumab (completed March 2021). A restaging scan (February 2022) demonstrated low-volume progressive disease and an incidental finding of a dilated right atrium. On assessment, she described progressive, debilitating, exertional dyspnoea (MRC grade 3) which began during first-line systemic therapy. She had no relevant past medical, family or social history. Examination demonstrated oxygen saturations of 88% on room air and signs consistent with pulmonary hypertension.

Results

An electrocardiogram demonstrated sinus rhythm with poor R wave progression and diffuse T wave inversion. A trans-thoracic echocardiogram identified findings consistent with a high probability of pulmonary hypertension, including a severely dilated right ventricle, severe tricuspid regurgitation (peak velocity 4.2m/s with hepatic flow reversal), septal flattening and a dilated right atrium alongside preserved left ventricular function. Thoracic imaging including CT-pulmonary angiogram and ventilation-perfusion scan demonstrated no thromboembolic or parenchymal lung disease.

The patient was commenced on home oxygen and referred to the specialist pulmonary hypertension service (assessment awaited).

Conclusions

Though Bevacizumab-induced pulmonary hypertension is a recognised sequela, frequency remains unknown. Non-specific presentation and post-marketing identification contributes to under-appreciation and delayed diagnosis. This case report seeks to heighten awareness and encourage yellow card reporting.

The uncertain benefit of adjuvant chemotherapy in advanced low-grade serous ovarian cancer and the pivotal role of surgical cytoreduction.

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Aims

This study evaluates the efficacy of this paradigm by analysing survival outcomes and comparing the influence of different clinical and surgical characteristics between women with advanced LGSOC (n=37) and advanced HGSOC (n=300).

Background

HGSOC and LGSOC two completely different diseases, yet standard management of both these groups has historically been identical and consists of cytoreductive surgery with systemic platinum-based chemotherapy

Methods

Retrospective data collection of advanced stage LGSOC and HGSOC between 2014 and 2017 in St James University Hospital Leeds. Multivariate analysis was used to identify independent prognostic features for survival in LGSOC and HGSOC.

Results

Adjuvant chemotherapy was given in 99.7% HGSOC patients versus 27% LGSOC (P < 0.0001). LGSOC patients had greater surgical complexity scores (P < 0.0001), more frequent postoperative ICU/HDU admissions (P = 0.0002) and higher peri-/post-operative morbidity (P < 0.0001) compared to HGSOC. The 5-year OS and progression-free survival (PFS) was 30% and 13% for HGSOC versus 57% and 21.6% for LGSOC, P = 0.016 and P = 0.044, respectively. Surgical complexity (HR 5.3, 95%CI 1.2 - 22.8, P = 0.024) and complete cytoreduction (HR 62.4, 95% CI 6.8-567.9, P < 0.001) were independent prognostic features for OS in LGSOC.

Conclusions

This study demonstrates no clear significant survival advantage of chemotherapy in LGSOC. It highlights the substantial survival benefit of dynamic multi-visceral surgery to achieve complete cytoreduction as primary treatment for LGSOC patients.

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Outcomes of patients with platinum resistant ovarian cancer (PROC)

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Aims

To investigate the survival outcomes in PROC.

Background

PROC has a poor prognosis. Treatment options exist but there is limited evidence to guide management strategies.

Methods

Retrospective analysis of all patients with PROC treated at a tertiary centre between 2010-2020. Overall survival (OS) and progression free survival (PFS) were calculated using Kaplan-Meier method.

Results

40 patients with high grade serous OC were included. Median age was 54 years (IQR 49-60). 39 had debulking surgery (41% primary, 54% interval, 5% delayed).

Prior to development of PROC (defined as progression within 6 months of prior platinum), a median of 2 cycles (range 1-5) of platinum chemotherapy was administered. 2 patients received 1 line of non-platinum chemotherapy. Median time to PROC was 25 months (IQR: 10-46). 33% had prior PARP inhibitor therapy. Following platinum resistance, 22.5%, 45%, 25% and 7.5% patients received 1, 2, 3 and 4 or more lines of treatment respectively. Treatment included Paclitaxel (n=30), Cisplatin/Etoposide (n=9), Liposomal-doxorubicin (n=15), Cyclophosphamide (n=14), and immunotherapy/ chemotherapy (n=6) within a clinical trial.

Median OS following development of PROC was 14 months (range 1-74). Median PFS for first, second and third line treatment for PROC was 2.9 (0.5-16), 2.5 (0.1-12) and 1.5 (0.3-8.4) months respectively (p = 0.04).

Conclusions

PFS following PROC is <3 months which is consistent with existing literature. The role of treatment beyond first line is unclear. OS is poor and urgent strategies are needed to improve outcomes for these patients.

Thromboprophylaxis for patients with Ovarian Cancer undergoing Neoadjuvant Chemotherapy: a prospective audit following a change in practice

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Aims

To assess the implementation of thromboprophylaxis assessments for patients having NACT, including safety, compliance, and VTE rates.

Background

We have previously demonstrated that patients with advanced ovarian cancer undergoing neo-adjuvant chemotherapy (NACT) are at unacceptably high risk of venous-thromboembolism (VTE). In an audit of 286 patients, 14% developed VTE during NACT, with 78% developing pulmonary embolism. Following this, local guidelines were amended from January 2021, to require patients commencing NACT to be assessed for enoxaparin thromboprophylaxis using the Khorana-score.

Methods

Prospective audit from January 2021, including all patients with advanced ovarian cancer undergoing NACT, from treatment decision until immediate post-operative period. We monitored assessment with Khorana score, thromboprophylaxis prescription/safety, and VTE rates.

Results

43/48 patients from January to September 2021 with a decision for NACT were commenced on NACT. There were no compliance issues, and no evidence of adverse events. 11/43 (26%) patients were not eligible for enoxaparin due to low Khorana-score. Whilst numbers are small, VTE rates were 4.8% for those on thromboprophylaxis, versus 9.1% for patients not on thromboprophylaxis, in-line with expectations.

Conclusions

There has been successful implementation of thromboprophylaxis assessment with no compliance issues, and no adverse events. The initial impact on VTE rates are encouraging, although further prospective data is required for confirmation. We would advocate for the consideration of oral anticoagulation for all at-risk-patients, and for other centres to consider assessing patients undergoing NACT for thromboprophylaxis.

Targeting AKT and DNA-PK as a therapeutic strategy in platinum resistant High-grade Serous Ovarian Cancer

<u>Dr Natasha Rinne</u>¹, Professor Christina Fotopoulou¹, Dr Paula Cunnea¹ ¹Imperial College London, Greater London, United Kingdom

Aims

To evaluate inhibition of AKT or DNA-PK as a strategy to target platinum resistance in HGSOC, and identify proteomic signatures confirming mechanism of action.

Background

The role of the PI3K/AKT/mTOR pathway is described in chemo-resistant HGSOC through activation of AKT by DNA-PK in response to platinum treatment. As increasing numbers of AKT and DNA-PK inhibitors advance to clinical trials determining mechanism of action is crucial.

Methods

Panel of seven AKT and DNA-PK inhibitors were tested in combination with cisplatin in immortalised HGSOC cell lines and primary tumour cells; Clonogenic assays to establish effect of treatment on ability of cells to form colonies; Isobologram assays to establish synergy/antagonism between inhibitors and cisplatin; Proteomic Reverse Phase Protein Array to determine mechanism of action.

Results

Treatment with AKT or DNA-PK inhibitors in combination with cisplatin led to enhanced apoptotic responses in platinum-resistant HGSOC cell lines (n=5), and primary cells (n=4, p<0.01, p<0.05), compared to cisplatin alone. In cell lines, fewer cell colonies were observed with increasing concentrations of AKT or DNA-PK inhibitors in combination with cisplatin (n=3) compared with cisplatin alone. Varying synergistic effects were observed across the panel of inhibitors when combined with cisplatin.

Conclusions

AKT or DNA-PK inhibition functioned synergistically with cisplatin in platinum-resistant HGSOC cells and reduced cell growth and proliferation. In both immortalised and primary cell lines tested, AKT or DNA-PK inhibition significantly enhanced the apoptotic response to cisplatin.

Impact of Surgery on Surgeon Health (ISSUE): A Feasibility Study

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Aims

ISSUE aims to develop and validate a multi-faceted assessment tool to objectively capture the real-time physical/psychological impact of surgery on the surgeon.

Background

Minimally invasive surgery (MIS) is associated with superior peri-operative morbidity/mortality outcomes compared to open surgery for the management of many conditions, however the impact of an increased MIS workload on surgeons has been largely forgotten

Methods

Consultant surgeons (Gynaecological Oncology/Colorectal) were recruited to collect data on the impact of performing intra-abdominal procedures (open/laparoscopic/robotic-assisted). The study is funded by an Intuitive Surgical Research Grant.

Results

Eight surgeons have undertaken preliminary skills testing with/without monitoring equipment. Performance metrics were recorded using the Lapskills software (Innovus). The surgeons' smoothness/acceleration scores for cutting/suturing/knot tying tasks indicated high technical skill that was unaffected by the monitoring equipment. A medical physics assessment of monitoring equipment was performed in the theatre environment. The first patient was recruited in January 2022 and currently 3-5 cases (open/laparoscopic/robotic) are recruited/week. It is anticipated that recruitment of the initial 65 cases will be achieved by May 2022 and the validation cohort (100 cases) by February 2023.

Conclusions

Recruitment to ISSUE is progressing well and there is a high level of engagement with both surgeons and patients. The outcome of ISSUE will be a validated tool with high sensitivity at detecting high impact surgery that can be used in a prospective, multi-centre study to provide an objective measure of the impact of different surgical routes on the surgeon.

A new way forward for data collection, presentation and sharing.

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¹Lancashire Teaching Hospitals NHS Foundation Trust, Royal Preston Hospital, Preston, PR29HT, United Kingdom

Aim

To create a single database linking all relevant data available at an NHS Trust for patients with gynaecological cancer.

Background

Data collection and analysis has always been an integral part of service transformation and research in the treatment of cancer. Patient data will be held in a number of digital systems within each Cancer Network and NHS Trust. NHS Trusts make regular submissions of data to national databases and disease registries (eg Hospital Episode Statistics, Cancer Outcomes and Services Dataset) as part of their contracted duty to the NHS. However, the data held at a local and regional level is far more detailed than that submitted to national databases and registries.

Methods

The gynaecological oncology team was supported by a dedicated team of clinical data scientists to identify and link all relevant data sources held within our NHS Trust.

Results

The data sources identified included regional cancer registration platform, patient records, prescribing (including chemotherapy), laboratory, radiology, radiation oncology, cardiopulmonary exercise testing and patient administration systems.

Conclusion

We successfully linked relevant datasets into a single Microsoft SQL database. The data is used to create dashboards and outputs to inform the gynaecological oncology service (eg activity, surgical outcomes and complications, coding and income overview) as well as providing focused datasets for specific research and service transformation questions. In addition an anonymised dataset will be published into a Trusted Research Environment (TRE) to be made available to other investigators.

Stage at diagnosis of gynaecological cancers: has COVID-19 had a negative impact?

Dr Emma Long¹, Miss Madeleine Macdonald¹

¹Sheffield Teaching Hospitals Nhs Foundation Trust, Sheffield, UK

Aims

To evaluate the impact of the COVID-19 pandemic on stage at diagnosis of cervical and vulval cancers.

Background

The COVID-19 pandemic has had a significant impact on cancer services. There are a limited publications related to stage of cancer at diagnosis, which suggest fewer cancers were diagnosed at an early stage during the pandemic. This study aims to contribute data on the impact of the pandemic on gynaecological cancers.

Methods

Data was collected for patients diagnosed with cervical and vulval cancers between January 2019 and December 2021 using the South Yorkshire, Bassetlaw and North Derbyshire Gynaecological Oncology Database and local integrated clinical reporting systems (ICE).

Results

There was a reduction in the proportion of cervical cancers diagnosed as early stage (1&2) from 84% in 2019 to 70% in 2021 and an increase in stage 3/4 cervical cancers from 13% in 2019 to 25% in 2021. Similarities were seen in vulval cancers with 93% early stage at diagnosis in 2019 and 69% in 2020. Stage 3/4 vulval cancers increased from 3% in 2019 to 14% in 2020.

Conclusions

It is possible that interruption to screening services, reluctance to access healthcare and changes to cancer services as a result of the COVID-19 pandemic could have contributed to the reduction in early-stage diagnoses. More analysis of national data is required to understand whether these findings are a true reflection of the pandemic, or merely fluctuations in longer term trends.

Compliance with documentation of staging of ovarian cancers at MDT: A cross sectional retrospective study.

<u>Dr Sreya Maddineni</u>¹, <u>Dr Holly Richardson</u>¹, Anne Gasser, Dr Michelle Ferguson¹, Dr Kalpana Ragupathy¹

**INHS Tayside, Dundee, United Kingdom

Aims

Analyse the stage of ovarian cancer at presentation in our cancer unit.

Background

Quality performance indicators for Ovarian cancer were introduced in Scotland in 2017. Initial study of the cohort of women with ovarian cancer diagnosed between 2013 and 2017 showed discrepancy in survival outcomes across Scotland with ?inferior survival outcomes in the North Cancer Alliance. Quality improvement projects (QIP) have been initiated because of this, one of which suggested under staging of ovarian cancers.

Methods

An excel sheet was used to collect details of women diagnosed with ovarian cancer between 2019 and 2021. Clinical data collected include radiology, pathology, MDT review of scans and initial staging documented. The data sheet was reviewed, and staging given by two clinicians with consensus.

Results

There was no difference in staging for early-stage ovarian cancers. For advanced ovarian cancers, 18/67 (27%) were restaged; of these, 17 were upstaged to stage 4 from 3 and one was down staged from 4b to 4a. 75% advanced ovarian cancers were stage 4 that could have precluded surgery.

Conclusions

Our retrospective QIP has shown discrepancy in staging of advanced ovarian cancers; we have alerted the NCA regional MDT group about our findings. This resulted in an active prompt at the regional MDT about agreed clinico-radiological staging for advanced ovarian cancers. It has also shown high proportion of stage 4b in our cohort that could have contributed to inferior survival outcomes.

Ovarian cancer service evaluation at a UK gynaecological cancer centre

Dr Luke Roberts, <u>Mr Jonathan Frost</u>, Miss Laura Atherton

¹Royal United Hospitals Bath NHS Foundation Trust, United Kingdom

Aims

Evaluating ovarian cancer treatment at a UK gynaecological cancer centre against proposed quality performance indicators set out by the British Gynaecological Cancer Society (BGCS).

Background

The centre wished to audit performance against new BGCS targets.

Methods

Data was extracted from the Cancer Registry and simultaneously from clinical systems for patients diagnosed with ovarian, primary peritoneal carcinomas and fallopian tube cancers from 01/01/2016 to 23/03/2021. 1st Results were audited against BGCS quality performance indicators 2, 3, 4a, and 4b. Kaplan-Meier curves were generated for the assessment of 1 and 3 year survival rates.

Results

This cohort had a 1-year survival rate of 90% and a 3-year survival rate of 59% (stages 2-4), 5-year survival could not be assessed. The survival compare favourably to the national average. When the departmental performance is audited against proposed standards set out by the BGCS, the department consistently achieve above the targets, the only exception being the reporting of FIGO ovarian cancer stage (93% reported failing to meet the stipulated 95% target).

Conclusions

This report highlights the gynaecological oncology department appears to achieve appropriate treatment targets and survival rates. There was improvement required in the correct documentation of patient data, this has implications for patient care, perceived departmental performance, remuneration, and quality of national data. New processes were introduced to ensure the accurate recording of audit data and updated retrospective data was uploaded to the national ovarian cancer audit database.

Virtual triage of postmenopausal bleeding referrals to outpatient hysteroscopy. A service evaluation of a new patient pathway.

<u>Mr Ryan Hogan</u>¹, Dr Ralf Warren¹, Dr Megan Ainsworth¹, Dr Maike Chapel¹, Dr Simon Mitchell¹, Dr Suzanne Owen¹, Miss Sophia Julian¹

Aims

We assess a new referral pathway using Consultant-led virtual triage for timely access to outpatient hysteroscopy (OPH) and treating cancer cases within 62 days of referral.

Background

To manage a 250% rise in referral numbers at a rural tertiary referral hospital, rapid access clinics were replaced with a once-weekly virtual clinic to review referral letters and ultrasound results, triage patients to outpatient hysteroscopy and follow up histology results.

Methods

Electronic records were reviewed for all PMB referrals over a 12-month period and re-referrals within six months of 1st referral.

Results

From June 2020 to May 2021, 1290 patients were referred with PMB. On average 11 days following referral, referral letters and TVS results were reviewed in the virtual clinic and 38% (493) of patients were discharged from the pathway.

55% (715) patients were appointed to OPH clinics. 47 cases (3.6%) of endometrial cancer and 16 cases (1%) of endometrial hyperplasia with atypia were diagnosed and treated within 54 days of referral. 51 patients (4%) were re-referred within six months of first referral. No cases of endometrial cancer or endometrial hyperplasia with atypia were diagnosed.

Conclusions

Virtual triage of PMB referrals is a valuable tool in safely managing increasing referral numbers within the time constraints of the 62-day cancer referral target. It allows more efficient use of clinic resources in comparison with a 'One-Stop' service and appears safe and acceptable to patients.

¹Royal Cornwall Hospitals NHS Trust, Truro, United Kingdom

Electrochemotherapy is an alternative palliative treatment option for patients with recurrent vulval carcinoma.

Mr Efstratios Theofrastou¹, Mr Christopher Page¹, Mr Paolo Matteucci¹, Dr Marina Flynn¹

**Hull University Teaching Hospitals, Hull, United Kingdom

Aims

To present the role of electrochemotherapy as a palliative treatment option in managing recurrent vulval carcinoma and the impact of this treatment for patients

Background

The treatment of recurrent or advanced vulval carcinoma can be complex, including Surgery, Chemotherapy and Radiation (1). Patients with advanced vulvar cancer suffer from symptoms which can have a significant impact on the quality of life (2). The location of the tumour, the age and comorbidity profile impact on the risk associated with treatment and women may not be suitable candidates for radical treatment. Electrochemotherapy, has been effectively used for the management of skin cancers (3), and has shown promising results in managing vulval cancer.(4)

Methods

We present a case series of women with recurrent vulval cancer who had electrochemotherapy as a palliative treatment alternative and their clinical outcomes

Results

Follow up of the patients demonstrates tumour regression, improved symptoms and quality of life post procedure

Conclusions

Electrochemotherapy is an alternative effective palliative treatment in the management of recurrent vulval cancer in selected cases unsuitable for surgery/chemotherapy.

NURSE LED ULTRASOUND GUIDED PARACENTESIS FOR GYNAECOLOGICAL MALIGNANT ASCITES

Mrs Helen Frise-Jones¹

¹Hywel Dda University Health Board, Carmarthen, United Kingdom

Aims

The introduction of Prehab aims to rectify correctable deficits in the patient's physical and psychological wellbeing in order to enhance their performance status. However, the build-up of abdominal ascites can hinder this.

Background

Historically, Paracentesis has been difficult to organise as the Health Board has one interventional radiologist per hospital site who are inundated with diagnostic work therefore struggle to accommodate therapeutic paracentesis. Unfortunately, despite educating the patients regarding timing of drainage by the time they make contact they are already very distressed with the symptoms feeling that they 'can't go on'.

Methods

Figures taken from electronic records of both planned and emergency admissions for drainage of ascites for gynaecological patients within one of our four general hospitals were compared. This also included data on their length of stay. Patient experiences were also included within this work.

Results

On average patients needed to wait over 7 days for an appointment. Most cases of paracentesis were performed as emergency admissions and for those directed to A&E due to symptoms had a longer length of stay than planned day case admissions. The symptoms can be extremely distressing having a significant impact on a prehab schedule therefore timely management of the ascites is required.

Conclusions

An alternative solution for this issue was explored which resulted in setting up a day care nurse led ultrasound guided paracentesis service

Analysis of Anxiety, Depression and Fear of Progression at 12 months Post Cytoreductive Surgery in the SOCQER2 (Surgery in Ovarian Cancer - Quality of Life Evaluation Research) study.

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Aim

To investigate the prevalence of anxiety, depression, and fear of progression (FOP) at 12 months post-cytoreductive surgery for ovarian cancer (OC) and correlation with patient (age, performance status, BMI), tumour (stage, disease load) and surgical (radicality, timing) factors.

Background

Depression and anxiety are significantly higher in women with OC compared to healthy women. Depressed or anxious OC patients have lower survival, longer hospitalisation and poorer treatment compliance. Current studies are based on descriptive case series, and the effects of these factors on depression, anxiety and FOP remains unknown. The SOCQER2 study investigated impact on mental health on patients undergoing cytoreductive surgery of varying complexity for OC.

Methods

141 patients with FIGO Stage III–IV, who did not have disease progression completed the Hospital Anxiety and Depression Scale and FOP short-form questionnaire at 12 months post-surgery as per protocol (Ref No: 15/WM/0124).

Results

Patients underwent surgery with low (40.4%), intermediate (31.2%) and high (28.4%) surgical complexity scores. Incidence of significant depression and anxiety at 12 months was 14.9% and 70% respectively. 26.4% experienced dysfunctional FOP. No clinically important differences were identified between the different radicality arms in regard to anxiety, depression or FOP scores.

Conclusion

The majority of advanced OC patients undergoing surgery experience significant anxiety. Approximately ¼ of the patients develop depression or even dysfunctional FOP. Radicality of surgery was not associated with anxiety, depression or fear of progression, suggesting that the diagnosis more than the treatment itself causes psychological distress. Patients with OC need routine assessment and support for mental health at the onset of their diagnosis.

ACCEPTANCE: a multi-component intervention to increase physical activity levels after treatment for cervical cancer.

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Aims

To develop a multi-component physical activity (PA) intervention targeting the uptake of PA after cervical cancer treatment, named ACCEPTANCE.

Background

A lack of lifestyle intervention, low levels of physical activity (PA) and unmet emotional/physical needs after cervical cancer treatment are contributing to compromised quality of life among survivors.

Methods

Participant recruitment was primarily through the University Hospitals of Leicester. Eligible criteria were: age 18-60 years; treatment for cervical cancer at least 6-months previously; and not meeting the national PA guidelines. Participants were invited to participate in a 12-week PA programme to increase individual and group-based walking. To evaluate the programme, participants were asked to wear a GENEActiv accelerometer and to complete questionnaires at baseline, within programme and follow-up.

Results

30 participants were recruited, of which 23 (77.6%) completed the intervention and follow-up. The mean age of participants was 40 years. The majority had undergone surgery alone (66%), whereas 23% underwent chemoradiotherapy alone, and 10% both treatment modalities. The *fitbit* PA monitor, the programme launch session and the fortnightly health coaching had the highest compliance rates of the programme components. Preliminary results suggest increases in moderate to vigorous PA by 13.96 minutes/day from baseline to follow-up. QOL decreased through-out the intervention, whilst anxiety and depression scores improved from baseline to follow-up.

Conclusions

The ACCEPTANCE intervention requires only minor modifications before it can be taken forward to determine its effectiveness in a larger definitive trial.

Utility of Routine CT Thorax in Grade 1 endometrial cancers

<u>Miss Elizabeth Dickinson</u>¹, Dr Nidal Ghaoui, Dr Cameron Martin, Dr James May, Dr Peter Sanderson, Dr Scott Fegan

¹University Of Edinburgh, Edinburgh, United Kingdom

Aims

The aim of this study was to assess the utility of CT chest scans in the pre-operative workup for women diagnosed with grade 1 endometrial cancer.

Background

Endometrial cancer is one of the most common female malignancies in the developed world, with an increasing incidence and mortality. Current UK and European guidelines are unclear on the use of CT chest scans in the staging of grade 1 endometrial cancer. The literature suggests that low-risk tumours have a low rate of pulmonary metastases at diagnosis.

Methods

A retrospective cross-sectional study of patients undergoing staging and surgical evaluation for grade 1 endometrial cancer in Lothian between October 2019 and February 2020 was performed. Data on CT findings, MMR investigations, staging and demographic characteristics was extracted from Trak and analysed.

Results

A total of 71 patients were evaluated. 61 patients (87.3%) underwent pre-operative thoracic imaging. No patients had pulmonary metastases identified. Forty-four (71.0%) patients had abnormal findings on their CT scans including six patients with suspicious pulmonary findings. 17 patients required further investigations or assessments. Treatment was not adjusted in any of these patients. MMR deficiency was investigated in 28 (45.2%) patients. There was a 7.3% recurrence rate in those treated with primary surgery.

Conclusions

The incidence of pulmonary metastases identified on pre-operative imaging in grade 1 endometrial cancer was 0%. Based on these findings it is suggested that CT imaging could be omitted for grade 1 endometrioid endometrial cancer patients.

Radiologically guided omental biopsies in suspected ovarian malignancy – factors associated with an inadequate tumour yield for BRCA/HRD testing.

<u>Dr Jess Bartlett</u>¹, Dr Will Loughborough¹, Dr Rebecca Bowen¹, Dr Pinias Mukonoweshuro¹, Dr Adrian Andreou¹, Mr Jonathan Frost¹

¹Royal United Hospitals, Bath, United Kingdom

Aims

To identify factors causing inadequate tumour yield for HRD testing in radiologically guided omental biopsies.

Background

Maintenance PARP inhibitors significantly increase the progression-free and overall survival in newly diagnosed advanced ovarian cancer. Different PARPi are reimbursed in the UK dependent on tumour BRCA and HRD status such that this assessment has become standard of care. BRCA/HRD testing is best performed on initial biopsy samples. AstraZeneca, funding the Myriad Genetics testing, communicated a high proportion of biopsy samples with insufficient tumour yield for HRD analysis.

Methods

We retrospectively analysed data for all radiologically-guided omental biopsies for ovarian cancer in our institution over a two year period.

Results

95% of all biopsies had sufficient material for histological diagnosis (37/39). However, of samples sent for HRD testing, 39% (7/18) had insufficient tumour for analysis. In all cases with suboptimal tumour content, only 3 or 4 cores were acquired. All samples where 5-6 cores were taken had sufficient tumour for HRD testing. Pre-biopsy imaging was analysed to assess whether there was a clear soft tissue target for the biopsy. For cases with enough tumour for analysis, 73% (8/11) had a clear soft tissue target, compared with only 57% (4/7) with insufficient tumour. Analysis is ongoing, with more data expected in the coming months.

Conclusions

We propose all omental biopsies in suspected ovarian cancer have at least 5 cores acquired. Additionally, MDT consideration should be given to whether laparoscopic rather than radiological biopsy are more appropriate in patients without a clear soft tissue target.

The completeness and legibility of gynaecological oncology ward-round documentation in a large UK cancer-centre: audit-cycle and staff survey

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¹Royal Derby Hospitals, Nottingham, United Kingdom

Aims

To standardise the documentation of gynae-oncology ward rounds – improving completeness, efficiency, legibility and patient safety.

Background

Complete and legible documentation is central to patient safety, especially after highly complex surgeries in often frail patients. However, several factors impact the quality of record-keeping – including busy wards, understaffing, and high turnover of junior doctors.

Methods

Data was collected from ward-round documentation - 24 categories of patient assessment and legibility (cycle I). A questionnaire was completed for personal experience of ward-rounds and improvement suggestions. Results were presented to Trust stakeholders and standardised ward-round proformas developed and piloted for 2 months. A re-audit was undertaken, closing the loop and evaluating this change in practice (cycle II).

Results

Cycle I: n=50. x3 categories of patient assessment were documented in >90% of ward rounds; x9 in > 50%; x6 in < 50%; and x4 in <10%. For legibility, 45% scored '1-perfect' and 8% '5-below average'.

Cycle II: n=35. x4 categories of patient assessment were documented in >90% of ward rounds; x13 in >50%; x3 in < 50%; and x2 in <10%. For legibility, 72% scored '1' and none as '5'.

Conclusions

Global improvement was demonstrated on re-audit for documentation across 18/24 categories of patient assessment and legibility. To conclude, the utilisation of a standardised gynaecology ward round proforma appears to improve the completeness, efficiency, and legibility of documentation – generating a robust record and optimising patient safety.

Development of the Cancer Care Coordinator

Mrs Angela Broadley¹

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Aims

To establish a standardised skills and development framework and career pathway for cancer care coordinators.

Background

There is a variance of skill mix, experience and duties within the cancer care coordinator role. I began by looking at the differences and similarities in the roles of the cancer care coordinators within my Trust. I also found there is no clearly defined career pathway within the UK or internationally. This could present an issue in forming boundaries and expectations of the role, which could cause issues in recruitment, retention and succession planning.

Methods

Initially, I studied articles and information around the role of the cancer care coordinator and the impact this role has had on the cancer workforce. I also collated various skills and competency frameworks and looked at adapting the areas that were relevant to the cancer care coordinator role. I then created a staff survey to gain further insight into the roles of the cancer care coordinators in my Trust.

Results

I have created a skills and development framework model to incorporate the variances I have found.

Conclusions

I have shared this information with my local Cancer Alliance as well as the Project Lead for a piece of work looking at cancer support workers nationally.

As an integral part of the workforce, it is extremely important to ensure that cancer care coordinators have the right training, support and development opportunities to be able to carry out their role effectively.

The Breast & Gynaecology Oncology Team: A New Way of Working

Mrs Marion Webb¹, Mrs Angela Broadley¹

¹Harrogate And District Nhs Foundation Trust, Harrogate, United Kingdom

Aims

To create a new and innovative way of delivering the specialist nursing service for breast and gynaecological cancer patients whilst also solving succession planning and staffing shortages issues.

Background

In 2016, the team leader for the breast cancer nurses retired and the gynaecology nurse specialist was a single post holder – this presented two problems, but also an opportunity to try out a new way of working. In April 2016, the Breast and Gynaecology clinical nurse specialist teams joined forces giving them the opportunity to become dual trained and multi skilled, which would lead to an improved patient experience.

Methods

A patient satisfaction survey was sent out four years after the amalgamation of the team to gather data in order to measure success and areas for improvement for the new working practice

Results

Results of the survey demonstrated that levels of patient satisfaction are high and provided some very positive feedback about the team, including levels of knowledge and information sharing. There were inevitably some less positive responses, but these were a very small minority.

Conclusions

Joining the two nursing teams together did present challenges, such as conflict of priorities between the two specialities and workload pressures whilst dual-training staff. However, the long-term benefits of increased knowledge, team flexibility, increased peer support and improved health outcomes for patients have proven that this innovative way of working is something to be celebrated.

A survey to establish endometrial cancer patients' current awareness of Lynch Syndrome

Mrs Hilary Maxwell¹, Dr Hannah Pierce

¹Dorset County Hospital, Dorchester, United Kingdom

Aims

To determine the current level of awareness of Lynch Syndrome in UK endometrial cancer patients. To further understand how and when this information is received by patients in order to guide future development of patient education within this area.

Background

Since October 2020, NICE has recommended that all endometrial cancer patients be offered molecular testing for Lynch syndrome. The condition affects up to 1 in 280 people and is a type of inherited cancer syndrome which predisposes patients to a range of different cancer types including colorectal, endometrial and ovarian. Most patients are unaware of their diagnosis and endometrial cancer is the most common first presentation of the condition in women. Service development and implementation of molecular testing for Lynch Syndrome in gynaecology is still in its infancy. However, molecular testing will enable personalised adjuvant therapy for endometrial cancer patients, education and screening for Lynch Syndrome patients about other high-risk cancers and cascade testing to detect relatives also at risk so that they can access relevant advice and healthcare. These elements make it a very important and rapidly developing area of gynae-oncology.

Methods

An anonymous survey was designed using Microsoft Forms which was then electronically distributed through social media outlets (Twitter/Instagram) of a national gynaecological cancer charity, Go Girls. Results will then be analysed using Microsoft Excel.

Results

Data collection is currently ongoing, results and conclusion to follow.

Ensuring Digital Inclusion in Gynaecology Oncology: A Macmillan supported QI project

Miss Laura Atherton¹, Mr Jonathan Frost

¹Royal United Hospital, ,

Aims

Patients should have access to the facilities and support to carry out a video consultation with their clinician

Clinicians should feel confident to deliver care over the video platform

Background

The NHS has faced a huge challenge over the last 2 years; delivering safe and effective healthcare at a distance in order to protect patients from COVID-19. Initial evidence highlights that video consultations are an excellent way to provide this care.

Methods

A survey of patients attending a gynaecology outpatient clinic showed that 98% would have preferred a video consultation to face-to-face. Reasons given were ease of transport, parking, avoiding exposure to infection and saving time. 2% of patients did not have the equipment/know how to have a video appointment.

A grant was secured from Macmillan and a platform created in which these digitally excluded patients could have access to equipment (tablet, mobile data) to carry out such an appointment. Patients could self-refer to the internal IT services to organise a 'mock' consultation prior to their consultant appointment. The platform used also has the functionality to allow patients to share images of post-operative wound healing or other concerns. It also allows patients to complete a short questionnaire after their consultation so we can evaluate patient satisfaction.

Results

The first stage of the project will run over 6 months and then the success will be evaluated by staff and patient feedback.

The association between social deprivation in Northern Ireland and treatment of ovarian cancer

<u>Dr Josh Courtney McMullan</u>¹, Ms Lisa Ranaghan¹, Dr Hans Nagar¹

¹Belfast City Hospital, Bangor , United Kingdom

Aims

To assess the association between social deprivation in Northern Ireland (NI) and the treatment of ovarian cancer

Background

The ovarian cancer audit feasibility pilot in 2018 suggested a geographical variation of treatment of ovarian cancer in England.

Methods

All patients diagnosed with epithelial ovarian cancer between 2014 and 2017 were included, those with borderline tumours in the same timeframe were excluded. Data was collected electronically for all patients and their treatment types, if any. Postcodes were obtained for all patients and a Northern Ireland Statistics and Research Agency (NISRA) deprivation index was calculated and patients were ranked into deprivation quintiles (1 = least deprived, 5 = most deprived). This was correlated to the treatment that each patient received (specifically active cancer treatment vs no treatment and surgical vs non-surgical treatment) to assess if any correlation was identified.

Results

603 patients were identified. 101 patients in deprivation quintile-1 (83% active treatment, 75% surgery), 132 patients in deprivation quintile-2 (83% active treatment, 56% surgery), 129 patients in deprivation quintile-3 (89% active treatment, 54% surgery), 108 patients in deprivation quintile-4 (88% active treatment, 69% surgery), 133 patients in deprivation quintile-5 (91% active treatment, 64% surgery). No statistically significant correlation was found between social deprivation status and treatment modality.

Conclusion

There is no correlation between social deprivation status and treatment of ovarian cancer in NI.

The impact of COVID-19 on the Cervical Screening Programme and Colposcopy Services in Northern Ireland

<u>Dr Josh Courtney McMullan¹</u>, Dr Laura Rainey¹, Dr Lorraine Johnston², Dr David Morgan²

¹Northern Ireland Medical & Dental Training Agency, Belfast, United Kingdom, ²Northern Health & Social Care Trust, Northern Ireland

Aims

To assess the impact of COVID-19 on the cervical screening programme in Northern Ireland (NI).

Background

In April 2020 the NI government paused all routine cervical screening invitations. Colposcopy services continued at reduced capacity. This has raised concerns of a potential delay in cervical cancer diagnosis and treatment.

Methods

Data was collected from the largest geographical health and social care trust in NI. All patients who were invited to colposcopy following an abnormal cervical screening result from September-November 2019 were compared to those presenting from September-November 2020. Data collected included demographics, presenting smear, time to report, method of biopsy and biopsy result.

Results

158 patients were included in 2019 and 87 in 2020 (45% reduction). There was a mean increase of 5 days to report the presenting smear in 2020. The most common presenting smear result was a borderline result for both years but a 7% increase in severe dyskaryosis during 2020. A smaller time interval was seen in 2020 for colposcopy review and a mean reduction of 36 days for reporting the cervical biopsy result was seen during 2020but no significant change in biopsy result was seen. There was a small increase in cervical cancer during 2020 (2.3% vs 0.63%).

Conclusions

The severity of presenting smears had increased during COVID-19 with a reduction in total numbers referred to colposcopy. This could potentially cause a backlog of patients when services are reintroduced.

The impact of COVID-19 on the diagnostic and treatment pathways for patients with endometrial cancer in Northern Ireland

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¹Belfast City Hospital, Bangor, United Kingdom

Aims

To assess the impact of the COVID-19 pandemic on the presentation, management and outcomes for patients diagnosed with endometrial cancer in Northern Ireland (NI).

Background

COVID-19 has significantly impacted all areas of medicine including access to primary care. The majority of women with endometrial cancer present in early stages and have promising survival outcomes. The concern is that COVID-19 has caused potential delays in diagnosis leading to patients requiring more extensive surgical management and affecting disease outcomes.

Methods

All patients diagnosed with endometrial cancer in 2019 (pre COVID-19), 2020 (during peak of COVID-19) and 2021 (during COVID-19 recovery) were included. Patients with myometrial sarcoma, other myometrial tumours and endometrial cancer recurrences were excluded. Data was collected electronically including histology, FIGO stage at diagnosis, symptom duration, parity, BMI, surgical location (regional cancer centre vs cancer unit), surgical approach and type, complications, adjuvant treatment and survival status. Statistical analysis was then performed on the data set.

Results

639 were patients identified in total (194 in 2019, 216 in 2020 and 229 in 2021). Provisional data appears to show that patients present with higher FIGO stage, undergo more open surgical procedures and more extensive surgery to manage their endometrial malignancy.

Conclusion

COVID-19 appears to have impacted the diagnostic and treatment pathways of women with endometrial cancer in NI.

Audit of Ovarian Cancer in Northern Ireland

<u>Dr Josh Courtney McMullan¹</u>, Dr Stephen Dobbs, Dr Ian Harley, Dr Hans Nagar, Dr Mark McComiskey, Dr Elaine Craig, Ms Lisa Ranaghan
¹Belfast City Hospital, Belfast, United Kingdom

Aims

To audit the ovarian cancer diagnosis and treatment of women in Northern Ireland (NI).

Background

Ovarian cancer is comprised of subtypes with a considerable variation in outcomes. In 2018 a funded ovarian cancer feasibility pilot was commenced in England with the aim to extend to all four UK nations.

Methods

All patients diagnosed with epithelial ovarian, fallopian tube and primary peritoneal cancer in NI were included between 2014 and 2017. Patients with borderline tumours were excluded. Data was collected using electronic data sources. Observed 5-year survival and time to disease recurrence was estimated by Kaplan Meier method.

Results

603 patients in total with two thirds of women present with advanced (stage 3/4) disease. High grade serous carcinoma (HGSC) was the most common subtype (69%). 11% were palliative and two thirds developed recurrence. Low grade serous, mucinous and endometrioid 5 year survival was 81%, 80% and 70% respectively compared to 49% for clear cell and 21% for HGSC.

Specifically for HGSC 42% had cytoreduction with chemotherapy (48% complete, 35% optimum), 16% were deemed unfit for active treatment. Median time to progression was 29 months for primary surgery and 16 months for interval surgery. Median overall survival was 24 months (primary cytoreduction 58 months and interval cytoreduction 37 months).

Conclusions

The outcomes for patients vary significantly based on the histological subtype at diagnosis. HGSC remains the most common subtype with a 5 year survival of 21%.

A rare cause of post menopausal bleeding - Clear cell carcinoma arising in a ureteric remnant associated with uterine didelphys

Dr Annie Russell¹, Ms Sarah Baron¹, Mr Peter Larsen-Disney¹

Background

Clear cell adenocarcinoma of the ureter is extremely rare and, whilst the prevelance of müllerian duct anomalies is 5% in the general population, uterine didelphys is rare with a prevelance of 0.3%. The presence of congenital anomalies of the kidney and urinary tract in women leaves them 5.9 times more likely to develop cancers of the urinary tract. Here, we outline a rare case of clear cell adenocarcinoma of the arising from the ureteric remnant associated with uterine didelphys, which presented with postmenopausal bleeding and a cervical mass.

Case

A 61-year-old woman with congenital left renal agenesis and uterine didelphys presented with recurrent post-menopausal bleeding and discharge. Biopsy of a left cervical mass revealed clear cell adenocarcinoma.

MRI, CT and PET/CT imaging showed uterine didelphys and an FDG-avid malignant mass from the redundant left distal ureter with ectopic insertion into the left cervix and vagina.

Total abdominal hysterectomy, bilateral salping-oophorectomy, upper vaginectomy and removal of pelvic mass was performed and histology confirmed clear cell adenocarcinoma arising from remnant ureteric wall projecting in to the left cervix. Post operatively, an MRI at 6 weeks showed local recurrence adjuvant chemotherapy and radiotherapy was commenced.

Conclusions

Clear cell adenocarcinoma originating in the upper urinary tract is rare and here we highlight the importance of considering the higher risk associated with urinary tract anomalies related to müllerian duct anomalies.

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Appraisal of referrals to gynaecological rapid access service in a single centre during the SARS-CoV-2 pandemic

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Introduction

The Sars-CoV-2 pandemic has had a significant toll on cancer services with the two-week wait and the 28-day faster diagnostic standard targets repeatedly unmet in 2021. Ensuring the rapid access clinics are preserved for patient with gynaecological symptoms requiring urgent assessment and investigation is crucial to meeting these targets. The aim of this audit was to assess the appropriateness of referrals to the gynaecology rapid access service.

Methods

Data on referrals to a gynaecological rapid access service were prospectively collected in a single centre from October 2021 to January 2022 to assess suitability of the referral.

Results

Data from 283 referrals were obtained and included for analysis (78.4% total referrals). Of these, 91% of referrals were assessed as inappropriate. Inappropriate referrals included bleeding on a recently altered HRT regimen, benign ovarian cysts, cervical polyps or Nabothian follicles. In total, eleven cancers were diagnosed through rapid access clinics. Ten cases of endometrial malignancy were diagnosed, with only one of these on HRT. One case of cervical neoplasia and one case of CIN were diagnosed. Cancers of the ovary, vagina and vulva were diagnosed via other clinical pathways.

Conclusion

This audit reported 91% of referrals to be inappropriate. This analysis highlights the need for adequate education regarding the appropriate use of this referral pathway from primary care services and is likely to also reflect relative inaccessibility of benign gynaecology services during the SARS-CoV-2 pandemic.

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Two cases of clinically and radiologically undetectable cervical adenocarcinoma presenting alongside mucinous ovarian tumours

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Background

Gastric-type cervical adenocarcinoma is a rare, HPV-independent, cervical adenocarcinoma associated with mucinous ovarian cancers. We outline two cases, initially presenting with a mucinous ovarian tumour but incidentally diagnosed with a synchronous gastric-type cervical adenocarcinoma.

Case 1

A 30-year-old, diagnosed with an ovarian mucinous cystadenocarcinoma three years following a contralateral ovarian mucinous borderline tumour. 7 months after fertility-sparing surgery she presented with post-coital bleeding, a normal cervical examination and MRI imaging suggesting recurrent disease. Disseminated disease was found at laparotomy and final histology diagnosed a synchronous primary gastric-type endocervical adenocarcinoma with distant metastases.

Case 2

An 80-year-old, presented with vaginal discharge. Imaging showed an ovarian mass with a normal CA125 and CEA and mildly raised CA19-9. Clinical cervical examination and pipelle biopsy did not suspect malignancy and she went on to have a pelvic clearance and omentectomy following intraoperative diagnosis of a mucinous borderline tumour of the ovary. Final histology confirmed this, alongside a synchronous gastric-type adenocarcinoma of the cervix.

On retrospective MRI review of the imaging in both cases the cervical tumours remained undetectable. Both cases are being considered for Peutz-Jeghers syndrome.

Conclusion

A high level of clinical suspicion for a possible diagnosis of concurrent cervical adenocarcinoma in patients with mucinous ovarian tumours is required. This should be considered in patients with symptoms of postcoital bleeding or abnormal vaginal discharge, as well as when associated with a raised CA 19-9. These endocervical tumours are easily missed on clinical examination.

Diagnostic complexity and a rare verdict – B cell lymphoma of the cervix

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Background

A primary manifestation of lymphoma of the is extremely rare, with B-cell lymphoma accounting for less than 0.5% of gynaecological cancers. This may result in a challenging diagnostic process. Here we present a case of a primary B-cell lymphoma of the cervix, the origin of which was initially considered as an adnexal mass, then progressing to mimic endometrial or cervical adenocarcinoma.

The case

A 38-year-old woman presented with renal failure and underwent ureteric stenting secondary to extrinsic ureteric compression. A CT scan suggested hydronephrosis secondary to an adnexal mass and referred for gynaecological opinion. MRI imaging further clarified this as being a mass related to the uterocervical junction. Clinical assessment revealed a bulky cervix, though with normal ectocervical appearance and normal initial biopsies. Following cystoscopy, large loop excision of the cervix and endometrial sampling, histology revealed a stage I high-grade B cell lymphoma of the cervix. She was treated with 6 cycles of R-CHOP chemotherapy with curative intent and end-of-treatment PET/CT showed complete radiological resolution.

Discussion

Primary B-cell lymphoma of the cervix is a rare diagnosis and one to consider when unusual clinical presentations arise. In this case it initially was felt to mimic an ovarian mass, then considered as endometrial origin or a cervical adenocarcinoma. Treatment significantly differs to these other gynaecological cancers and therefore accurate diagnosis with the use of advanced radiological imaging and diagnostic techniques is crucial to dictate gold-standard treatment.

Lynch Syndrome: Universal Screening In Newly Diagnosed Endometrial Cancer - A Quality Initiative

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Aims

To evaluate the effectiveness of routine diagnostic endometrial biopsy sampling in the screening of Lynch syndrome in endometrial cancer.

Background

Lynch syndrome (LS) is an autosomal dominant inherited disorder caused by germline mutations in DNA mismatch repair (MMR) genes, which increases the risk for endometrial and other cancers. Early identification of LS can lead to lifesaving interventions for both them and their relatives.

Methods

Universal screening for LS was carried out on consecutive primary endometrial cancers patients by analysis of immunohistochemistry (IHC) and DNA microsatellite instability testing.

Results

A total of 107 new endometrial cancers were diagnosed, of which 73.83 % (n= 79/107) were eligible for screening. The mean age and BMI at diagnosis was 67.55+/- SD 13.58 and 31.2 +/- SD 5.13, respectively. Mean time taken for diagnosis was 10.3 and 12. 2 days from endometrial biopsy and hysterectomy samples respectively.

MMR deficiency was noted in 25 % of tumours, (n= 20/79), of which 61.90 % (n = 13/20) were referred for genetic counselling. Amongst those referred for genetic counselling 85 %, n = 11/13 were deficient for the MLH1/PMS2 and 8 % n = 1/13 were deficient for the MSH6 and MSH2 protein respectively. Both MMR IHC and *MLH1* promoter methylation testing were conclusive in >99% of cases.

Conclusions

Routine screening of diagnostic endometrial biopsy samples is effective and can contribute to the diagnosis of LS in a timely manner.

Comparison of management options of Endometrial hyperplasia with atypia pre and post-covid pandemic; were we adhering to RCOG guidelines pre-covid?

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Aims

To identify the impact of Covid-19 on the management of endometrial hyperplasia with atypia, by comparing standards from RCOG Green Top Guideline No. 67 over a three year period

Background

Endometrial hyperplasia is a common precursor to endometrial cancer (EC). Management is dependent on subtype, primarily, surgery for atypical hyperplasia (AH). AH has also been associated with concomitant carcinoma in up to 43% in women undergoing hysterectomy. COVID-19 has had an unprecedented impact on operating capacity with the effects of this unknown.

Methods

A pathology database search was performed to identify patients with AH on biopsy. Electronic patient records used to identify patient demographics, risk factors, date of initial diagnosis, diagnosis, management and follow up.

Results

105 patients included; 34 pre-pandemic and 71 pandemic. 26.47% had surgery for AH pre-pandemic and 38.03% in pandemic. 47.06 % and 43.66% had either Mirena IUS or oral progesterone. Mean BMI was 36. Management compliance was poor compared to RCOG guidance. Pre-Covid, 59% did not meet treatment recommendations, this improved to 38% post COVID.

Conclusions

Rates of Hysterectomy for AH improved following during the pandemic. Many patients received progesterone treatment due to patient choice. Consideration should be given to the role of progesterone in the absence on surgical contraindication or fertility preservation in the treatment of AH. Also if this acceptable to patients given the risk of concomitant and future cancer.

Compliance with BHIVA-recommended HIV-testing following cervical cancer diagnosis. Clinical audit from a large UK cancer-centre.

Dr Harriet Crossland¹, <u>Dr Suzi Addley¹</u>, Mr Andrew Phillips¹, Mr Anish Bali¹, Mr Viren Asher¹, Mr Summi Abdul¹

Aims

To evaluate the rate of HIV-testing undertaken at the time of cervical cancer diagnosis in a large UK cancer-centre.

Background

HIV infection is a recognised risk factor for cervical cancer. Patients with 'indicator conditions' including cervical cancer are estimated to have an undiagnosed HIV sero-prevalence of >0.1%; contributing to the 9000 people living with HIV unaware in the UK. BHIVA/BASHH/BIA guidelines recommend opportunistic HIV-testing in patients presenting with such 'indicator conditions,' promoting early detection and treatment of HIV, hence optimising prognosis.

Methods

All patients newly diagnosed with cervical cancer within the University Hospitals of Derby and Burton NHS Foundation (UHDB) Trust between January 2019-December 2020 were identified. Electronic care records were reviewed retrospectively and data collected on HIV-testing at and within the 6-month time period following diagnosis.

Results

99 patients were identified. 2 patients (2%) were screened for HIV at the time of diagnosis, or within the subsequent 6 months. Both tested negative.

Conclusion

Whilst our study may not capture those offered but refusing testing, we demonstrate massive under-utilisation of HIV-screening at the time of newly diagnosed cervical cancer. This poor compliance with national guidance likely reflects lack of clinician awareness of current BHIVA/BASHH/BIA recommendations. Incorporation of such into cervical cancer guidelines and pathways more familiar to gynaecologists would likely better promote as standard in this at-risk population – remaining mindful of the need for adequate alongside patient counselling and support.

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Geographic Monitoring for Early Disease Detection (GeoMEDD): Linking Emergency Medicine with Gynaecological Oncology for Timely and Targeted Screening, Prevention, and Early Diagnosis

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Aims

Describe how GeoMEDD, a near-real-time COVID-19 spatial syndromic surveillance tool, is being applied to identify granular geographic clusters of cervical and endometrial cancers relevant to targeting screening, prevention, and early diagnosis across a U.S. regional health system

Background

Geographic cluster detection has been widely applied across numerous cancers, bringing advances in understanding health-place relationships that can target screening, prevention, and early diagnosis activities. However, most of this work has been retrospective and geographically coarse. Geographic Monitoring for Early Disease Detection (GeoMEDD) was developed for near-real-time COVID-19 disease surveillance to direct timely and targeted interventions. In this study, we adapted GeoMEDD for this level of surveillance of cervical and endometrial cancers.

Methods

Electronic Health Records (EHRs) of patients with locally advanced cervical cancer and with endometrial cancer diagnosed from 2015 to 2021 were geocoded based on address at diagnosis. GeoMEDD ingested these geocoded points to identify geographic clusters at a variety of user-defined spatial and temporal scales.

Results

Novel clusters were detected across the study region, ranging from individual buildings to small areas within neighbourhoods. This output was used to educate clinical collaborators and they are now using it to create more geographically-aware risk stratification for their patients.

Conclusions

Translating near-real-time and granular geospatial disease surveillance approaches to gynaecological cancers holds promise for directing screening, prevention, and early diagnosis.

A case of endometrial adenocarcinoma incidentally diagnosed on routine cervical screening – A dying incidental diagnosis due to the change to primary human papillomavirus cervical screening?

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Introduction

Endometrial cancer is the most common gynaecological malignancy a in the UK amongst women. Despite this, there is no screening test available. However, it is occasionally diagnosed incidentally by the cervical screening programme. However, since 2019, the cervical screening programme in England, Scotland & Wales has changed to primary human papillomavirus (HPV) testing, As a result, the opportunity to incidentally diagnose Endometrial cancer in HPV negative women will be lost.

Case Report

A 57 year old lady attended for her routine cervical screening test and was found to be HPV positive. Therefore, cytological analysis was performed which identified abnormal cells of likely endometrial origin. The patient was asymptomatic and had a thin endometrium of 2.9mm on transvagainal ultrasound. A pipelle biopsy was obtained and the pathology reported papillary serous carcinoma. The patient subsequently underwent a robotically assisted hysterectomy, bilateral salpingo-oophorectomy, sentinel lymph node dissection and peritoneal washings. The final histopathology confirmed serous endometrial intraepithelial carcinoma.

Conclusion/Discussion

Since 2019, cervical screening London (CSL) has identified 14 cases of non-cervical cancers. Although this is a relatively small number, as >85% of cervical screening samples are reported HPV negative, it is likely that many other cases are no longer identified.

On review of the literature, a systematic review of 45 studies reported 45% of patients with endometrial cancer have abnormal cervical screening cytology before their diagnosis.

Pre-eclampsia During Pregnancy and Risk of Endometrial Cancer: A Systematic Review and Meta-Analysis

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Aims

This systematic review and meta-analysis aimed to summarise the available evidence on pre-eclampsia during pregnancy and subsequent risk of endometrial cancer.

Background

Pregnancy is associated with decreased risks of developing endometrial cancer, however associations with pregnancy complications is understudied. Pre-eclampsia is a common pregnancy condition and has been suggested to contribute to future development of endometrial cancer, yet previous investigations have been conflicting.

Methods

Three online databases were searched to identify studies investigating pre-eclampsia during pregnancy and future risk of endometrial cancer up to February 2022. Articles were screened independently and a random effects model was utilised to pool results producing hazard ratios (HRs) and 95% confidence intervals (CIs).

Results

Seven observational studies were identified that included 713,000 women and 11,724 endometrial cancer cases in total. Pooled analysis found no significant association between pre-eclampsia and risk endometrial cancer and moderate heterogeneity was observed (HR 1.01, 95% CI 0.22-3.66, $I^2 = 36.6\%$). In sensitivity analysis including studies that investigated risk of endometrial cancer or other endometrial neoplasia (including atypical hyperplasia, carcinoma in situ), there was some evidence that pre-eclampsia was associated with an increased risk (HR 1.34, 95% CI 1.13-1.60, $I^2 = 31.7\%$).

Conclusions

Overall, pre-eclampsia during pregnancy was not associated with an increased risk of developing endometrial cancer, but limited studies were identified. Additional large studies are required, in particular to investigate the impact of pre-eclampsia on risk of endometrial cancer precursor conditions.

The Impact of the COVID-19 Pandemic on Endometrial Cancer and Endometrial Hyperplasia Diagnosis: A Population-Based Study.

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Aims

To describe the impact of the COVID-19 pandemic on pathologic diagnosis of endometrial cancer and endometrial hyperplasia in the first UK population-based study in Northern Ireland.

Background

Most endometrial cancer cases arise from a precursor lesion endometrial hyperplasia. During the COVID-19 pandemic, many professional bodies advised a suspension in gynaecological services, with the exception of urgent care, to reduce COVID-19 transmission and optimise limited human and physical resources.

Methods

The Northern Ireland Cancer Registry is a population-based register covering 1.9 million inhabitants. Electronic pathology reports were used to identify unique patients diagnosed with endometrial cancer or endometrial hyperplasia between March 1, 2020, and December 31, 2020 (the initial stages of the COVID-19 pandemic when "lockdown" was introduced at various times). Data were compared with the average number of histopathologically confirmed cases during the same periods between 2017-2019.

Results

The number of endometrial cancer diagnoses declined by 19.1% between March-December 2020 compared with the equivalent period in 2017-2019. There was some evidence of recovery in winter months, with diagnoses in October/November returning to expected levels. The number of atypical hyperplasia and hyperplasia without atypia diagnoses declined by 35.2% and 43.5%, respectively, compared with 2017-2019. Data were too limited to indicate recovery in winter months.

Conclusions

Although endometrial cancer diagnoses showed some signs of recovery, endometrial hyperplasia diagnoses continued to lag behind expected rates during the first 10 months of the COVID-19 pandemic.

Endometrial Cancer Risk Awareness: Developing Tools to Influence Change

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Aims

To develop and validate an instrument to assess public awareness of endometrial cancer symptoms and risk factors

Background

Endometrial or womb cancer is the most common gynaecological malignancy in the developed world. Efficient and cost-effective methods of increasing public awareness about endometrial cancer are research priorities for patients and clinicians. Until now, there has been no accepted measure of endometrial cancer awareness.

Methods

Womb Cancer Awareness Measure (WCAM) items were identified from the literature and cancer awareness materials. Test-retest reliability was assessed over two weeks, construct validity assessed using by comparing womb cancer experts and non-medical academics and sensitivity to change by comparing scores of participants who read an endometrial cancer leaflet to a control leaflet. The validated WCAM was tested in a UK population sample.

Results

The readability of the WCAM was high; over half of items showed>80% agreement in test-retests. Experts achieved higher knowledge scores than non-medical academics indicating good construct validity(p<0.001). The measure was sensitive to change; the womb cancer leaflet group(n=22) scored higher for cancer awareness [mean 70(13)] than the controls(n=21)[mean 54(6.2)](p<0.001). Knowledge of endometrial cancer red flag symptoms and risk factors were poor in our UK population sample (849 self-identified female participants via social media).

Conclusions

Our findings support the validity and reliability of the WCAM in assessing public awareness of endometrial cancer. In a UK population sample, knowledge of warning symptoms and risk factors was low, highlighting the need for public awareness campaigns.

Mesonephric-like adenocarcinoma of the female genital tract: large case series

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Aims

We present 10 cases of mesonephric-like adenocarcinomas(MLA) and describe their morphological, immunological and molecular profile.

Background

Mesonephric-like adenocarcinomas (MLA) are rare neoplasms with a reported incidence of 1% of all endometrial carcinomas. They are a recently described, distinct category of tumours of the gynaecological tract. In the literature a total of 154 cases have been reported.

Method

Electronic record review from 2018 onwards yielded 10 patients with MLA (cervix, endometrial and ovarian).

Case series

All cases of mesonephric-like adenocarcinoma showed architectural heterogeneity with a variety of growth patterns: tubular, glandular / pseudoendometrioid, papillary, solid (with spindled cells), angiomatoid, trabecular, retiform, sieve-like and glomeruloid.

Immunohistochemically, all our cases displayed a high frequency of TTF-1, GATA3,PAX8 and luminal CD-10 positivity whilst being weak or flat negative for hormone receptors ER and PR.

All ten of our cases harboured KRAS mutations on codon 12. These mutations have been described in all cases in the literature suggesting their role in pathogenesis and a potential scope for molecular characterisation and targeted treatment options

Conclusions

Due to their rarity and morphological heterogeneity, they can be misdiagnosed as other neoplasms by the unsuspecting pathologist. A correct diagnosis becomes all the more imperative as these have been shown to have a more aggressive clinical course with a tendency for pulmonary metastases and chemoresistance. They belong in the No Specific Molecular Profile group (NSMP,TCGA) and have a worse prognosis.

Multi-disciplinary collaboration to achieve early adoption of universal Lynch Syndrome screening in women with endometrial cancer in the North East and North Cumbria.

<u>Miss Handan Yilmaz-Palta</u>¹, Mr Ben Wormald¹, Miss Nithya Ratnavelu¹, Dr Angela Ralte¹, Mr Stuart Rundle¹ ¹Queen Elizabeth Hospital, Gateshead, United Kingdom

Aim

To demonstrate the early effective uptake of Lynch Syndrome (LS) screening in women with endometrial cancer (EC) through collaborative working across pathology and surgical cancer services in the North East and North Cumbria

Background

The National Institute of Health and Care Excellence (NICE) recommends universal screening for LS in women diagnosed with EC by tumour testing followed by referral to clinical genetics and germline testing when appropriate. Furthermore, this is an ambition and national strategy within the NHSE/I Genomic Medicine Service (GMS). We set about a multi-disciplinary collaborative effort across the Northern Cancer Alliance footprint to implement universal testing in time for Q1 2021.

Methods

All patients diagnosed with EC between March-2021 and December-2021 across 6 referring trusts, whose pathology was reviewed at Queen Elizabeth (QE) Hospital, Gateshead were identified. Retrospective audit of patient records demonstrated compliance with testing, reporting and referral.

Results: 141 patients were identified. There was 99% (139/141) compliance with tumour testing. 2 patient's tumour blocks were not assessible. There was 63% (86/139) compliance with discussion of tumour testing results at MDT. Despite this there was 100% compliance with referral to clinical genetics for eligible patients at risk of LS (n=6).

Conclusions

Collaborative working between pathology and surgical services with simultaneous development of testing and clinical protocols allowed universal screening for women in the North East to be realised, fulfilling current guidance and the ambitions of the NHSE/I GMS National LS project in our region within the first year of roll-out.

Conservative management of patients diagnosed with CIN 2 – review of local data

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Background

Cervical intraepithelial neoplasia (CIN) is a premalignant squamous lesion of the uterine cervix diagnosed by histology. The goal of management is to prevent possible progression to cancer whilst avoiding overtreatment. As lesions spontaneously regress (over two years CIN 2 will regress in 50% of women kept under surveillance), observation may be an option for carefully selected patients with CIN 2 who wish to preserve fertility.

Methods

We reviewed the outcomes for patients on CIN2 conservative management pathway following MDT discussion over a period of two years. All patients fulfilled the following inclusion criteria: diagnosis of CIN 2, nulliparous or P1 with no previous treatment, age >35 years. Follow up outcome of management was assessed at 2 years as per PHE guidance.

Results

We analysed 36 patients who were managed on the conservative pathway by our local team between 2017 and 2018. For each year our data show that 75% of the cases showed regression, 20% of patients had LLETZ in 2017 and 12.5% in 2018. The four patients who had LLETZ in 2017 had CIN3 (2 patients), CIN 2 and CIN1. The two patients who underwent LLETZ in 2018 had CIN 1 and 2. Patients were offered LLETZ due to progression on cervical biopsy.

Conclusions

Our data from two consecutive years show that conservative management of CIN 2 in carefully selected patients is effective and safe. None of the patients progressed to cancer when followed up for 2 years and (three patients in total dropped out).

Management of primary malignant melanoma of the vagina

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Background

Vaginal melanoma(VM) is a rare malignant tumor accounting for 2–5% of female genital tract melanomas. Studies evaluating 5-year survival of VM have reported rates ranging from 13% to 32.3%. Due to the very low incidence of this disease worldwide, to date there have been no randomized controlled trials to address disease staging and management. Surgical excision with the aim of achieving clear margins has been the treatment of choice for local control of disease in the published literature. However, the extent of surgery, the role of lymphadenectomy and when to use adjuvant chemo/radiotherapy are debatable.

Results

We present a 58 YO female with a diagnosis of VM. As part of the initial work up patient had MRI which showed subtle focal thickening in right anterior wall of the lower third of the vagina with no lymphadenopathy. PET CT showed no increased uptake. Patient was offered radical surgery for local control, so she underwent total laparoscopic hysterectomy and bilateral salpingo-oophorectomy, vaginectomy, vulvectomy and distal urethrectomy and insertion of suprapubic catheter with EBL <150ml, no intra op complications and was discharged on D5. Final histopathology revealed invasive malignant melanoma with satellite foci involving vaginal, urethral and vulval mucosa. Considered advanced stage disease. Post op CT done two months after the operation showed radiological recurrence- a left inguinal nodal mass. Patient was offered immunotherapy with ipilimumab and nivolumab. Last review at four months confirmed achieving baseline QoL.

Conclusions

This is a rare case of gynaecological malignancy managed with aggressive surgical approach with the aim to achieve optimal local control.

Pelvic exenteration: radical but optimal for carefully selected patients with locally advanced vulvar cancer

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Aims

To evaluate the outcomes of women who received treatment with pelvic exenteration for locally advanced primary or recurrent vulvar cancer in our centre and to analyse factors that influenced prognosis.

Background

The treatment of locally advanced vulvar carcinoma (LAVC) represents a major challenge and there is no consensus on its optimal treatment strategy.

Methods

Women who underwent pelvic exenteration for primary and recurrent LAVC in our centre between 2001 and 2019 were included.

Results

Among the 19 women included during the study period, 14 women (73.7%) had pelvic exenteration for primary LAVC while five women (26.3%) had the procedure for recurrent disease. Surgical resection margins were microscopically clear (R0) in 94.7% of patients – 14/14 undergoing primary treatment and 4/5 undergoing treatment for recurrence. Complete closure of the wound was achieved in 100% of women, with no wound left to heal by secondary intention. Tumour size was a predictor of requiring myocutaneous flap reconstruction, with all tumours less than 40mm undergoing primary closure, while almost all tumours 40mm diameter or greater (14/15 women) required flap reconstruction (p=0.001). The 30-day major morbidity rate was 42% and there was no peri-operative death. The mean overall survival was 144.8 months (2-206 months), with 1-, 2- and 5-year survival rates of 89.5%, 75.1% and 66.7% respectively.

Conclusions

In our centre, a primary surgical approach to the management of LAVC has resulted in good survival outcomes with acceptable morbidity rates.

The prevalence of mismatch repair deficiency in ovarian cancer: systematic-review and metanalysis

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Aims

The aim of this study is to conduct a systematic review of the literature and meta-analysis to provide an accurate estimate of the prevalence of MMRd in OC.

Background

Ovarian cancer (OC) is the most fatal gynaecological malignancy. Checkpoint inhibitors have shown clinical efficacy in mismatch repair deficient (MMRd) cancers and could be a powerful treatment in OC. However, their application in OC is limited due to limited data on the prevalence of MMRd.

Methods

We followed PRISMA guidelines throughout. Studies were identified by searches of online databases and followed by citation searching. All studies were reviewed by at least two independent reviewers. Proportions of test positivity were calculated by random and fixed- effects meta-analysis models. I² score was used to assess heterogeneity.

Results

In total 54 studies and 17532 OCs were analysed for MMRd. The overall proportions of MMRd by immunohistochemistry and microsatellite instability analysis were 6.7% and 10.4%, respectively. MMRd was most common in endometrioid OC. We estimated that 46.7% (95% CI, 28.8 to 65.4) of OCs showing MMRd by IHC had a germline path_MMR variant identified. Lynch syndrome OC presented at an earlier age and stage. Studies however were of low quality.

Conclusions

Up to 16% of OC displays MMRd and therefore could be amenable to checkpoint inhibition therapy. However, further high-quality prospective studies are required, including trials researching the efficacy of check point inhibition in MMRd OC.

The impact of the new RCOG 2019 curriculum and COVID 19 pandemic on Gynaecological training amongst the Specialist Trainees in the United Kingdom: a cross sectional study.

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Aims

Our survey aims to find how the new RCOG curriculum and COVID 19 pandemic affected gynaecological training amongst specialist trainees in the UK.

Background

The Royal College of Obstetricians and Gynaecologists (RCOG) introduced a new curriculum in 2019. Furthermore, the National Health Service was hit by the COVID 19 pandemic in 2020.

Methods

A cross sectional study was conducted using the University of Leicester online survey platform involving the RCOG trainees in the UK from the 1st of June 2021 to the 1st of October 2021.

Results

We received replies from 10% of trainees. The quality of gynaecology training under the new RCOG curriculum was described as less than good in 75.6% of respondents. Around one-third (29.2%) of trainees did not have local gynaecology simulation training. The COVID 19 pandemic adversely affected all aspects of gynaecology training. Benign gynaecology, subfertility, urogynaecology, and gynaeoncology modules training were affected in 94.0%, 85.1%, 89.7%, and 83.5% of trainees, respectively. During the pandemic, gynaecology teaching was affected in 84.9% of trainees, redeployment occurred in 11.8% of trainees, and 16% suffered adverse ARCP outcomes.

Conclusions

Our survey reveals that the new RCOG curriculum and COVID 19 pandemic have simultaneously compromised the gynaecology training amongst the UK trainees. RCOG and GMC-led more comprehensive survey would be welcomed to corporate our findings and take necessary actions.

Palliative chemotherapy vs no treatment in advanced ovarian cancer (AOC) patients: Reasons and benefits.

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Background

The role of palliative chemotherapy in treating AOC remains unclear. However, some evidence suggests that chemotherapy has a role in relieving symptoms in AOC.

Aim

To explore the reasons why patients were managed by palliative chemotherapy or no treatment and to evaluate the effect of palliative chemotherapy on AOC survival outcomes.

Methods

A retrospective cohort study was conducted in the University Hospitals of Leicester from January 2015 to January 2020 involving 54 patients with advanced ovarian cancer: 34 patients received palliative chemotherapy (group 1), and 20 patients had no treatment (group 2).

Results

In group 1, 27 (79.4%) were not suitable for debulking surgery, 4 (11.8%) died before surgery, 3 (8.8%) patients declined surgery. In group 2: 13 (65%) died before chemotherapy, and 5 (25%) were not fit for any treatment, 1 (5%) patient died before surgery, and 1 (5%) patient declined surgery. The 12- and 18-months overall survival in group 1 were 55.9% and 38.2%, respectively, while it was 5% and

0% in group 2. The overall survival rates were significantly higher in group 1 (p<0.001).

Conclusions

Palliative chemotherapy increases the overall survival in advanced ovarian cancer patients. Still, the cost of treatment and the effect on the quality of life should be balanced to meet the patients' expectations.

Vulvar Malignant Melanoma: Twenty year experience from a Tertiary Cancer Centre

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Aims

To determine the relationship between margin excision and patient survival To determine the approaches used to treat vulvar malignant melanoma (VMM)

Background

VMM is rare, comprising less than 5% of vulvar cancers. It is an aggressive cancer, with poor oncological outcomes and is associated with low survival and higher recurrence rates. Surgery is the main stay of treatment for non-metastatic disease. The benefit of adjuvant chemotherapy, radiation or immunotherapy is not certain.

Methods

Twenty-five patients with histological diagnosis of VMM were identified from hospital records. Two were excluded due to incomplete records. Demographic, clinical and follow-up data was collected and analysed.

Results

The median age of the cohort was 73. All 23 patients had primary surgery, varying from wide radical excision to radical vulvectomy. 14/23 (60.8%) had clear margins. Four patients underwent further excision, one underwent exenteration, and four received palliative intervention. 5/23 (21.7%) of patients underwent lymph node biopsy. 1 patient underwent bilateral groin node dissection. 3 patients received immunotherapy – one with primary treatment; two with recurrence. 12/23 (52.1%) had recurrence.

Overall DFS was 30.8 months. In patients with tumour-free margins, DFS and OS was 53.4 months and 80.9 months respectively. However, in patients with tumour-positive margins, DFS was 11.2 months and OS was 54.7 months

Conclusions

In patients undergoing primary surgery for VMM, those with clear margins had better oncological outcomes than those with involved margins. The role of sentinel lymph node biopsy requires further investigation.

Cytoreductive surgery in endometrial cancer – is it time to get onboard?

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Aim: To investigate the potential benefit to survival of cytoreductive surgery (CRS) in advanced high grade endometrial cancer (EC)

Background. Women with advanced EC have traditionally been managed palliatively. Emerging evidence suggests that maximal effort CRS may confer survival advantage in selected patients, as supported by BGCS EC treatment guidelines.

Methods: Women with FIGO stage 4 high grade endometrial cancer who underwent surgical cytoreduction at the Northern Gynaecological Oncology Centre between 2014 and 2018 were identified. Primary outcome variables included: cytoreductive result; details of adjuvant treatment and; overall survival (OS).

Results: 35 patients underwent planned CRS. 14 were serous cancers, 8 endometrioid, 8 carcinosarcoma, 4 clear cell and 1 mixed sub-type. 25/35 patients were completely cytoreduced, 7/35 were cytoreduced to < 1cm and 3/35 had disease > 1cm residual. All patients who were completely cytoreduced or had disease > 1cm residual received post-operative platinum based chemotherapy, as did 4/7 patients with cytoreduction to < 1cm residual. Median OS was 32.7, 24.8 and 3.9 months In the complete, <1cm and > 1cm groups, respectively. The median follow up was 20 months (range 0.6 -72.5 months).

Conclusion: This small patient group has shown a trend towards better survival with complete cytoreduction. CRS could be offered in select patients with advanced-stage EC where complete cytoreduction can be achieved. However, further prospective clinical trials are needed to establish role of CRS in this setting.

Residual disease threshold after primary surgical treatment for advanced epithelial ovarian cancer (EOC): A network meta-analysis incorporating expert elicitation to adjust for publication bias

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Aims

To explore and adjust using expert elicitation methods, the impact of potential publication bias, to confirm or refute existing conclusions and recommendations.

Background

Previous work has identified a strong association between the achievement of macroscopic cytoreduction and improved overall survival (OS) after primary surgical treatment of advanced EOC. This work has used best practice methods and comprehensive systematically assembled evidence. However, scepticism about effectiveness still exists.

Methods

We conducted random effects Bayesian network meta-analyses comparing OS across residual disease thresholds in women with advanced EOC after primary cytoreductive surgery. Elicitation methods amongst expert BGCS members were used to derive priors on the likelihood of missing evidence. The 'educated guesses' from respondents are the only substantial source of information in this area that may facilitate such adjustment. These were used to adjust for publication bias.

Results

Analyses using data from 25 studies (n=20,927 women) all showed the prognostic importance of complete cytoreduction (0cm). Experts accepted publication bias was likely, but after adjustment for their opinions, effect estimates were attenuated but conclusions remained robust in a series of sensitivity analyses.

Conclusions

There remains a strong association between the achievement of complete cytoreduction and improved OS even after adjustment for publication bias using strong informative priors formed from an expert elicitation exercise. The concepts underpinning the elicitation survey should be strongly considered for utilisation in other meta-analyses.

Ultra-radical debulking surgery for advanced stage ovarian cancer

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Aims

Assess the ultra-radical debulking surgery service between 2014 and 2020.

Background

Ultra-radical surgery for ovarian cancer was commenced in Nottingham in 2014. 100 cases were undertaken in 2014-19 and compared to the 39 cases undertaken in 2020. Comparison was made to assess if the first year of the COVID-19 pandemic had impacted the variables audited. As per NICE guidance, 2013 [IPG470] clinicians undertaking this type of surgery should audit and publish their outcomes.

Methods

Retrospective review of all cases (hospital IT systems interrogated) of all women undergoing ultra-radical debulking surgery between April 2014 - Dec 2020. Local data was then compared to published data to provide a benchmark.

Results

As the service evolved all women are electively admitted to ITU post operatively for an average of 2 nights before ward transfer. More extensive surgery was undertaken in 2020 with more women undergoing bowel resections (large and small) as well as undergoing extensive upper abdominal procedures. Liver mobilisation, diaphragmatic peritonectomy, splenectomy and exploration of porta hepatis were performed more often in 2020. Despite more extensive surgery intra operative need for blood transfusion and operative duration remained constant across the entire cohort 2014-2020.

Conclusions

39 cases were undertaken in 2020 despite the COVID-19 pandemic pressures on theatre capacity and ITU bed availability. When compared to the 100 cases undertaken in the preceding 5 years the cases in 2020 had more extensive surgery. The post-operative complications and readmission rates were similar despite more extensive surgery being undertaken in 2020.

Robotic surgery in Gynaecological Oncology – a District General Hospital experience

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Aims

To evaluate patient profiles, clinical outcomes and service impact of introducing robotic surgery in a cancer unit at a District General Hospital.

Background

Minimally invasive surgical techniques are safe for patients and associated with better visualisation, less blood loss and faster patient recovery. Robotic surgery boosts these advantages with wrist-like movements which enable more complex manoeuvres while increasing surgeon comfort.

Methods

This was a retrospective, observational review of 44 consecutive robotic operations performed by the gynaecological oncology team at the Colchester Hospital over the 10-month period.

Results

Patients were aged between 29 and 81, with BMI between 20 and 47. 52.3% of the patients had a BMI of 30 or more. 86% of procedures included robotic total hysterectomy with unilateral or bilateral salpingo-oophorectomy, while the rest were either unilateral or bilateral salpingo-oophorectomy. 47.7% of operations were for endometrial cancer, 21% for premalignant lesions of the cervix or endometrium, 20.5% for adnexal masses, and 13.6% for other indications. Mean docking time was 10.5 minutes. Only 2 patients had a blood loss over 100ml. 88.6% were discharged on the day after surgery, and there were 3 readmissions. There were no intraoperative complications, conversions to open surgery, admissions to intensive care unit or returns to theatre. Average docking and console times are showing a downward trend.

Conclusion

Introduction of robotic surgery to the gynaecological oncology team at Colchester has shown promising initial results, and team efficiency is improving over time.

Influence of Depth of Excision on Test of Cure Following Excisional Treatment for High-Grade CIN in a District General Hospital in Kent

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Introduction/Background

NHS Cervical Screening Programme(NHSCSP) has determined the depth of excision standards for high-grade CIN treatment. Standards vary according to Transformation Zone Type and are to be met for >=95% of the patients.[1] Patients receive Test of Cure(ToC) smears to assess success of treatment. Excisions of >10mm in women of reproductive age, lead to an increased risk of preterm delivery without improvement in recurrence rates. Therefore guidance suggests <10mm excision in >85%.[2]

Aims/Methodology

Our aim was to determine the influence of NHSCSP excision standards on ToC success rates. Data on women who had loop excision for high grade CIN from January 2020 to April 2020 was collected and analysed using OpenExeter, Telepath databases and Microsoft Office, Excel.

Results

A total of 123 women received loop excisional treatment for high-grade CIN. Our success of ToC was 65%(n=80), failed ToC was 19%(n=23) and ToC was not recorded for 16%(n=20). For TZT-1, 2 and 3; when standards were not met, success rates for ToC were 80% (n=20), 67%(n=10) and 48%(n=7) respectively. When standards were met, success rates for ToC were 70%(n=27) for TZT-1, 86%(n=6) for TZT-2 and 0%(n=1) for TZT-3. For patients of reproductive age(n=32), 75%(n=24) had excision depth <10mm.

Our unit took shallower loops than recommended by the NHSCSP. This adversely affected the success of ToC with TZT-2. Due to limited numbers, we are unable to comment on TZT-3.

- NHS Cervical Screening Programme, Publication Number 20, Third Edition, last update 28/09/21
- 1. Khalid S, Dimitriou E, Conroy R et al. The thickness and volume of LLETZ specimens can predict the relative risk of pregnancy-related morbidity. Br J Obstet Gynaecol, 2012,119: 685-69

Impact of Covid-19 Pandemic on Morbidity and Mortality in Gynaecological Oncology - South East Wales Gynecological Oncology Cancer Centre (SEWGOC) experience

Dr Roula Elboraei, Mrs Sara Elias, Mrs. Lynne Bray, Mrs Rhian Parker, Dr. Ewelina Rzyska, Dr. Sadie Jones, Mr Robert Howells, Mr. Kenneth Lim, <u>Dr. Aarti Sharma</u>

Aims and Background

The UKGOSOC study set a national benchmark of hospital reported morbidity and mortality complication (14.4%) following major surgeries (excluding grade 1 of Clavien-Dindo classification). The aim of our service evaluation was to analyse and compare our morbidity and mortality rates with national rates and to evaluate the impact on Covid-19 pandemic.

Methods

A retrospective analysis of data for all surgery undertaken during 1st June 2019 to 31st December 2021. Perioperative and up to 28 days postoperative morbidity and mortality data were prospectively collected and collated monthly. Excel was used for analysis.

Results

A total of 1171 operations (minor 254, intermediate 150, major 767) were undertaken. Before Covid-19 (June 2019-March 2020); 65/349 patients (18.6%) had a complication, 45/349 (12.9%) excluding grade 1, compared to 142/481(29.5%) patients 77/481 (16%) excluding grade 1 during the pandemic (April 2020 to December 2022). Majority were grade 2 complications (44%) with similar proportion of grade 1 (41%).

Conclusions

Overall complication rate excluding grade 1 complications (11.6%) is below the national average. The complication rate has increased during Covid-19 pandemic (16%). Almost double the patients have experienced a grade 1 complication in the pandemic compared to pre-covid. This maybe related to better reporting or actual increase in complications.

Use of E-consent in Gynaecological-oncology

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Aims

To evaluate patients' experience of e-consent in comparison to paper.

Background

Consenting to an operation is a significant moment in a patient's journey. Good consent encompasses informed decision-making and medico-legal protection. As healthcare becomes digitalised, consent must also find its place online.

Concentric is an electronic tool that enables clinicians to individualise an online consent form. Benefits include digital storage and reduced errors and omissions. E-consent speed is equivalent to paper. Nevertheless, a positive patient experience is fundamental.

Methods

A ten-question questionnaire was designed; a 5-point Likert Scale was used for eight questions (strongly agree corresponding to the most positive consent experience). This was used to assess paper (n=50) and electronic consent (n=50).

Anonymised questionnaires were collected from 100 patients undergoing gynaecological surgery at a tertiary London Gynaecological-oncology centre between October 2020 and July 2021.

Results

86% of paper-consented and 88% of e-consented patients agreed or agreed strongly with the Likert Scale questions. Electronically consented patients were 1.5 times more likely to agree strongly.

18% of paper-consented and 86% of e-consented patients received a copy. 72% of paper-consented and 86% of e-consented patients agreed strongly that the form was easy to read. 46% of paper-consented and 80% of e-consented patients agreed strongly that following the consent process, they were satisfied with the information they received.

Conclusions

E-consent is acceptable to patients in a Gynaecological-oncology setting. It appears more likely to provide patients with readable, comprehensive information that they are satisfied with.

Complex upper gastro-intestinal surgery in ovarian malignancy: a retrospective cohort study of patients with primary and recurrent ovarian cancer in a tertiary cancer centre

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Aims

To evaluate the risk of major complications in a cohort of patients with advanced ovarian cancer (AOC) whose cytoreductive surgery includes resection of upper abdominal disease and splenectomy.

Background

The standard of care for AOC involves surgery and platinum-based chemotherapy. Management guidelines recommend maximal effort cytoreductive surgery with the goal of complete cytoreduction. This often involves multi-visceral resections.

Methods

This is a retrospective cohort study evaluating morbidity and mortality following UGI surgery in patients with AOC patients from 1 January 2020 to 1 January 2022. Data on patient and disease characteristics, operative procedures, outcomes and complications were retrieved from our ovarian cancer surgery database.

Results

45 out of 219 patients (21%) undergoing cytoreductive surgery for primary or recurrent OC had concomitant upper gastrointestinal (UGI) surgery. This included 29 (45%) diaphragmatic resections and/or stripping, 8 (18%) liver resections and 7 (16%) splenectomies. 3 patients (7%) had Clavien Dindo grades 3-4 complications. 7 patients (16%) had post-operative pleural effusions, 5 were mild and 2 were moderate. 3 patients (7%) suffered pneumothoraces. There were no deaths.

Conclusions

In our cohort whose maximal effort cytoreductive surgery included complex UGI surgery, the rate of major complications was 7% and the mortality rate was 0. Gynaecological oncologists in our centre perform most of the UGI surgery independently, however UGI and hepato-pancreatico-biliary surgical involvement are readily available and almost always arranged ahead of surgery.

Bowel surgery in ovarian malignancy: a retrospective cohort study of patients with primary and recurrent ovarian cancer in a tertiary cancer centre

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Aims

To evaluate the risk of major complications in a cohort of patients with advanced ovarian cancer (AOC) whose cytoreductive surgery includes bowel resection and stoma formation.

Background

AOC standard of care involves surgery and platinum-based chemotherapy. Management guidelines recommend maximal effort cytoreductive surgery with the goal of complete cytoreduction. This often involves multi-visceral resections.

Methods

This is a retrospective cohort study evaluating morbidity and mortality following bowel surgery in AOC patients from 1 January 2020 to 1 January 2022. Data on patient and disease characteristics, operative procedures, outcomes and complications were retrieved from our ovarian cancer surgery database.

Results

31 of 219 patients (14%) undergoing surgery for AOC had concomitant bowel surgery. This included: 19 (61%) large bowel resections (LBR), 12 (39%) small bowel resections (SBR), 13 (42%) LBR + anastomosis, 4 (13%) LBR + anastomosis + covering stoma. There were 9 (29%) colostomies and 6 (19%) ileostomies. 5 (16%) patients had Clavien-Dindo grades 3-5 complications: 1 pancreatic leak, 1 bile leak, 1 nephrostomy, 1 lung collapse and 1 death. The mortality rate in this cohort was 3.2%.

Conclusions

In our cohort whose maximal effort cytoreductive surgery included bowel resection and/or stoma formation, the rate of major complications was 16% and the mortality rate was 3.2%. Gynaecological oncologists in our centre perform most of the bowel surgery, however colorectal and UGI involvement is available and almost always arranged ahead of surgery.

Endometrial cancer incidence and mortality: a worldwide analysis derived from the International Agency for Research on Cancer (IARC)'s GLOBOCAN 2020 database

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Aims

To provide an overview of the worldwide incidence and mortality of endometrial cancer in 2020, and to predict its future burden for the year 2040.

Background

The prevalence of endometrial cancer risk factors has been rising in most parts of the world and consequently, incidence rates are on the increase in recent generations. In particular, obesity has doubled in 30 years globally. High body mass index is estimated to account for a large proportion of the endometrial cancer burden globally.

Methods

Age-standardised incidence and mortality rates for endometrial cancer in 185 countries were calculated by country, world region, and for the four-tier HDI. New cases and deaths were projected for 2040 based on demographic projections.

Results

417,000 new endometrial cancer cases and 97,000 deaths occurred globally in 2020. While there were large geographic variations in incidence, overall mortality was relatively low. The highest incidence rates were found in North America and Central Eastern Europe, whereas the lowest were in Middle Africa and South-Central Asia. Our predictions indicate 46% and 62% increases in new cases and deaths, respectively, worldwide by the year 2040.

Conclusions

This study highlights a 20-fold variation in endometrial cancer incidence rates across world regions, which may in part be linked to obesity. With the global obesity epidemic predicted to continue to rise, and with population ageing and growth, it is likely that the burden of endometrial cancer incidence and mortality will also increase.

MILE (My Integrated Lifestyle and Exercise) - An integrated rehabilitation programme for women with ovarian cancer receiving neo-adjuvant chemotherapy followed by interval debulking surgery

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Aims

To evaluate the impact of MILE on postoperative length of stay, surgical cancellations, complication rates, and perioperative blood product use.

Background

Prior to interval debulking surgery (IDS), women are often deconditioned by the impact of advanced disease, and effects of chemotherapy.

MILE was established at The Royal Marsden Hospital in 2018. Its intent is to offer a coordinated prehabilitation service to women with advanced ovarian cancer (AOC), deliverable in the neo-adjuvant chemotherapy (NAC) treatment period. MILE has 5 components: physiotherapy, anaesthesia, anaemia management, dietetics and psychology.

Methods

This was a prospective cohort study of patients with AOC treated with NAC and IDS over 24 months. Data related to MILE's 5 components were collected using patient interviews and electronic patient records. Descriptive statistics were used for data analysis.

Results

Thirty-seven women completed the MILE programme. MILE led to reductions in: 1) median postoperative length of stay from 7 to 5 days; 2) surgical cancellation rate from 33% to 8%; 3) serious surgical complications from 1 for every 6.25 patients to 1 for every 9.25 patients; 4) mean perioperative blood transfusion from 1 unit to 0.33 unit / patient.

Conclusions

MILE improved several surgical outcomes. Its success is largely attributed to coordinated collaboration within the multidisciplinary team (MDT), through the working and steering groups and fortnightly MDT meetings.

Outcomes of Surgery for Advanced Ovarian Cancer after the introduction of Maximal Effort Cytoreductive Surgery

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Aim

To demonstrate the impact of the introduction of maximal effort cytoreductive surgery for the treatment of advanced ovarian cancer at an NHS Cancer Centre.

Background

Maximal effort cytoreductive surgery (MCS) for advanced ovarian cancer (AOC) aims to remove all visible disease through more extensive surgical resection. This is consistent with BGCS and other international guidelines. Extended pan-abdominal surgery requires extended operating times, additional high-dependency post-operative care and may involve other surgical teams. MCS was introduced in our Cancer centre in May 2017.

Methods

Outcomes for all patients with AOC who had surgery between Jan 2015 and April 2017 (Pre-MCS) were compared to those who underwent MCS between May 2017 and Dec 2019 (Post-MCS). Data was accessed from a dedicated gynaecological oncology database linking all digital health systems in our organisation.

Results

There were differences seen between the two groups in terms of average length of hospital stay, number of consultants involved in surgery and days spent in a high-dependency care area. The rate of primary cytoreduction and complete cytoreduction (CCO) increased following the introduction of MCS. The average tariff/spell increased from £4,846 to £7,874. Survival data demonstrates a trend to improvement.

Conclusion

We have shown that MCS increased the rate of primary surgery and complete cytoreduction in women with AOC. This required investment in additional peri-operative resource. However, accurate coding was reflected in enhanced tariff per hospital spell.

Fertility sparing surgery for juvenile granulosa cell tumours in an adolescent case series

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Aims

To report the clinical characteristics, surgical management and outcomes of adolescent patients with juvenile granulosa cell tumours (jGCT) of the ovary in a specialist centre.

Background

jGCT's are extremely rare tumours predominantly affecting a paediatric and adolescent population. There is limited literature to determine optimal management.

Methods

Clinicopathological data were collected retrospectively for patients diagnosed with jGCT of the ovary between 2009-2020.

Results

Six patients were identified - four with stage 1A disease, one stage 1C and one stage 3. The median age was 15 (range 12-16). Only one patient had abnormal vaginal bleeding. 4/6 had a complex mass on imaging. Preoperatively the diagnosis was suspected in two patients (33.3%). All had fertility sparing surgery. Four underwent a unilateral salpingo-oophorectomy (USO), two had an initial cystectomy later followed by completion USO. Open surgery was undertaken in four patients due to tumour size (range 11-22cm), two patients had laparoscopic surgery. Complete staging with omental and peritoneal assessment was performed in three patients, with one omental biopsy positive for disease. The patients with stage 1C and stage 3 disease received adjuvant chemotherapy. The median follow-up was 53 months (range 26-76 months). There were no recurrences and no deaths.

Conclusions

Symptoms of hormone disruption may not occur at presentation. Fertility sparing surgery via USO appears to be a safe approach. Stromal tumour markers should be checked in complex masses regardless of symptoms.

Management of endometrial pathology during the pandemic, overview of 2 years in one oncology centre.

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Aims

To review how COVID-19 pandemic affected patients receiving treatment who presented with symptoms of endometrial pathology.

Background

Endometrial hyperplasia and endometrial malignancy is one of the commonest abnormal pathology found in patients presenting with abnormal bleeding. Majority present at early stage hence treatment in form of hysterectomy is standard treatment options. In 2009, NICE recommended Key hole surgery to improve perioperative outcomes with significant benefits shown over open operation. During pandemic access to theatres was limited leading to delay in providing optimal treatment to patients. There were initial concerns with aerosol producing procedure with temporary avoidance of key hole surgery. Many patients who were deemed at risk of perioperative morbidity were treated conservatively with hormone treatment. Reintroduction of minimal access surgery during pandemic after initial pause enabled surgeons to provide all surgical treatment methods to patients include open hysterectomy, laparoscopic and robotic.

Methods

All cases of endometrial pathology treated during 2020 and 2021 were reviewed, Data was retrieved from hospital IT system. Demographics reviewed included age BMI, Diagnosis, treatment type, surgical treatment method, length of stay, readmission.

Results

Total of 249 cases were reviewed, 181 had surgical treatment of hysterectomy. Open procedure hysterectomy was undertaken in 80 patients, 55 cases had laparoscopic hysterectomy and 46 patients had robotic hysterectomy.

Length of stay was longest in open hysterectomy cases varying from 2 to 18 days. Readmissions were only seen in laparoscopic group. Robotic hysterectomy cases had shortest length of stay and no readmissions. Cases with comorbidity were managed conservatively with progestogens.

Conclusions

Natural history and incidence of neoplastic diseases is not altered by nay pandemic and patients require early treatment to improve clinical outcomes. Data would support offering robotic surgery to all patients to decrease the length of stay and readmission rates. Reflection on management during pandemic should help to overcome resistance to offering robotic surgery to all patients. The cost saving from hospital stay needs to be translated into the cost of providing the service and aiming for best patient outcomes.

IMPACT OF COVID-19 PANDEMIC ON ENDOMETRIAL CANCER PATHWAY – A CANCER UNIT'S EXPERIENCE.

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Aims

Assess waiting times of endometrial cancer (EC) pathway during the pandemic(2020-21) and compare it to pre-pandemic times (2015-16).

Methods

This retrospective study researched intervals throughout the entire journey of patients on suspected cancer pathway, from initial clinic appointment to biopsy dates, to cancer diagnosis, to CT staging and finally to date of surgery. Descriptive statistics was used to provide comparison between the two time periods.

Results

Average age was similar in both cohorts (67 years versus 69 years). Most patients accessed Postmenopausal Bleeding clinic (PMB) on their index visit in both cohorts (66% vs 58%). However, there was increased presentation at fast-track clinic due to advanced disease/symptoms (11% vs 2%). Average time interval between referral and index clinic visit was significantly longer in the pandemic cohort (23.7 days vs 13.2 days) and likewise, the interval between referral and cancer diagnosis (52.3 days vs 46.8 days) and interval between CT request and CT completion (14 days vs 7.6 days). There was significant increase in the interval between referral and cancer surgery in pandemic cohort (108.5 days) compared to pre-pandemic cohort (89.5 days). More women had advanced stage (stage ¾) in the pandemic cohort (18/60 vs 11/57).

Conclusions

Our study demonstrates increased journey time for women with endometrial cancer during the pandemic with more advanced stages at presentation. We propose to utilize this data for service improvement measures as the unit recovers from pandemic setbacks.

Adjuvant Chemoradiotherapy in Early Cervical Cancer: Retrospective Case Series from a Tertiary Cancer Centre.

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Aims

Evaluate the selection criteria and rates of adjuvant therapy (AT) following radical surgery for early cervical cancer (ECC).

Background

Despite its association with significant morbidity, the use of AT for ECC isn't always avoidable. During the COVID-19 pandemic, our centre subjectively noted an increase in Clinical Oncology referrals following surgery, prompting a review of our practice.

Methods

Retrospective data collation of radical ECC surgeries between July 2020 and July 2021, on demographics, preoperative investigations, post-operative histology and AT indications. Descriptive statistics and significance testing undertaken on Microsoft excel.

Results

Data was obtained for 25 patients who underwent either a radical hysterectomy (76%) or radical trachelectomy (24%). The majority (75%) had sentinel node sampling only, whilst 20% had full pelvic lymphadenectomies.

Median patient age range was 36-40. Histological types were: 52% adenocarcinomas, 40% squamous cell carcinomas, and 8% adenosquamous carcinomas. Final FIGO 2018 stages were: 1A2 (4%), 1B1 (28%), 1B2 (40%), 2B (4%), 3C1 (24%). 10 cases (40%) were upstaged compared to preoperative staging.

Adjuvant therapy was recommended for 12 (48%) patients; 7 were upstaged to 2B/3C1 and 5 had unfavourable histological features: extensive LVSI, poor differentiation, close margins, perineural invasion and presence of isolated tumour cells.

Conclusions

- Similar rate of AT requirement in our cohort compared to larger multi-centre studies.
- No differences in preoperative workup between AT-requiring and non-AT-requiring patients.
- Emphasis to be placed on careful counselling of patients and appropriate surgical case selection.

Performance of an epigenetic biomarker-based test for cervical cancer screening in a Nigerian population of women (PECCaN)

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Aims

Assess the diagnostic accuracy of an epigenetic biomarker-based test (WID™-CIN) for detecting cervical intraepithelial neoplasia (CIN) in a Nigerian population of women.

Background

Africa has a high incidence of cervical cancer due to a combination of poor cervical screening coverage, low HPV vaccination uptake and high HIV prevalence. Research has shown a high diagnostic accuracy of epigenetic biomarker-based tests in detecting CIN but these studies have been limited to developed countries, with predominantly white participants. This study is designed to assess the performance of the test in a homogenous African population.

Methods

<u>Design</u>: Prospective case-control diagnostic accuracy study

Recruitment: Women attending three Nigerian teaching hospitals for cytology-based cervical screening from which cases (high-grade squamous intraepithelial lesion) and controls (normal cytology) will be recruited. All participants will undergo clinician-collected and self-collected sampling for WID™-CIN test, HPV-based testing, colposcopy and cervical biopsy.

<u>Primary outcome</u>: Sensitivity and specificity of WID™-CIN test in detecting CIN.

<u>Secondary outcomes</u>: Satisfaction with self-collection, cost-effectiveness and feasibility.

Sample size: 50 cases, 50 controls.

Results

Analysed to determine sensitivity and specificity of WID™-CIN test in comparison to cytology and HPV-based cervical screening. Cost-utility analysis to instruct on feasibility of test introduction.

Conclusions

- Data provided on the diagnostic accuracy of WID™-CIN test in cervical screening of an understudied population.
- Use of results to inform on screening measures to aid WHO cervical cancer elimination goals.

Case report of a patient with a massive ovarian cyst and a history of previous liver transplant: preoperative, operative and postoperative considerations

Ms Amy Keightley¹

¹Great Western Hospital, Swindon, UK

Aims

We aim to identify preoperative, operative and postoperative considerations to achieve a safe approach to operating on women with massive ovarian cysts or similar pathology with a history of liver transplant.

Background

Around one thousand liver transplants are carried out in the UK every year and according to the British liver trust there were around 11000 people in the UK living with a liver transplant in 2021. Giant ovarian cysts are also now relatively rare in the west given the relatively quick easy access to inexpensive imaging such as ultrasound.

Results

A patient presented with an initial ultrasound scan initially thought to show massive ascites however a CT scan showed a giant ovarian cyst with septations but no papillary projections, solid areas or vascularity. Surgery in the form of midline laparotomy, total abdominal hysterectomy, bilateral salpingo-oophrectomy and infracolic omentectomy confirmed a 35x21x27cm ovarian cyst weighing in excess of 12kgs. Final histology showed cystadenofibroma.

Conclusions

The reliability of tumour markers, appropriate imaging choices made preoperative diagnosis a challenge. Intraoperative failure of spinal due to inability to curve spine due to the cyst was not anticipated. Concerns were raised about intraoperative cardiovascular stability and hypotension due to venacaval compression and fluid shifts. Mechanical and chemical thromboprophylaxis, HDU care, appropriate analgesia, early diet, mobilisation and early resumption of immunosuppressive medication were the mainstay of the postoperative care.

Effect of the COVID-19 pandemic on new gynaecological cancer diagnoses by stage and tumour site

Ms Amy Keightley¹

¹Great Western Hospital, Swindon, United Kingdom

Aims

Review of diagnostic trends in The Great Western Hospital between 2019 and 2021 to identify effects of the COVID-19 pandemic.

Background

The effect of the COVID-19 pandemic on GP appointments, diagnostics and attendance at cervical screening was unprecedented and affected suspected cancer referrals.

Methods

CADIS database identified patients with gynaecological cancers between January 2019 to December 2021. These were divided by tumour-site, stage and year. 222 cancers were identified, the site was unspecified in 8 cases and these were excluded.

Results

There was a reduction in new cancer diagnoses between 2019 and 2020 of 46% and increased again in 2021 by 7% compared to 2019 however there was a decrease in stage at presentation in 2021.

Presentation at stage 1 in endometrial cancer was 74% in 2019, 76% in 2020 and 80% in 2021.

Later stage presentations were seen in ovarian cancer in 2019 with only 35% presented with stage 1 disease compared to 53% in 2020 and 55% in 2021.

Earlier stage presentation in cervical cancer pre-pandemic, 100% presented as stage 1 in 2019, compared to 80% in 2020 and 72% in 2021.

Conclusions

Suspected endometrial and ovarian cancer referrals were less affected as GPs often referred without seeing the patient, without false reassurance of vague ovarian symptoms thus resorting earlier to imaging. Lack of attendance for cervical screening has led to increased cases of cervical cancer and later stage at diagnosis.

Three cases illustrate the effect of the Covid-19 pandemic exacerbating late diagnoses and gross pathology within the local gynae-oncology service at The Great Western Hospital in Swindon

Ms Amy Keightley¹

¹Great Western Hospital, Swindon, United Kingdom

Aims

We outline three cases that presented from July to September 2020 during the COVID 19 pandemic to a large cancer unit. These cases help illustrate some of the effects of the wider effects of the pandemic on cancer units.

Background

The COVID-19 pandemic started in 2019 and started circulating in UK in early 2020, with widespread public health measures being incrementally introduced from March 2020 and easing again from mid-April. The true effect of the COVID 19 pandemic on gynae-oncology services will only be evident in the fullness of time however some of the effects are relatively predictable and already evident.

Results

- Patient with a history of a liver transplant presented with swelling was found to have a massive ovarian cyst weighing in excess of 12kgs with a CA125 of 93.
- Patient with a large uterus initially thought to be degenerating fibroid with an unusual gas pattern on imaging. The uterus and two attached masses weighed in excess of 15kgs.
- Patient with an advanced huge carcinoma of the vulva involving both labia majora, clitoris, urethra and anus meaning the patient was unable to sit.

Conclusions

Themes identified include misdiagnosis, delayed presentation, presentation through emergency admission and effect of virtual consultations. These cases although unusual in their gross severity at presentation, display commonalities that have wider implications.

Fertility preserving trachelectomy for early stage cervical cancer

Dr Hilary Kok¹, <u>Dr Sarah Coleridge¹</u>, Mr Jaf Abu¹, Miss Carmen Gan ¹Nottingham City Hospital, , United Kingdom

Aims

Assess the fertility preserving trachelectomy service between 2013 and 2021.

Background

The peak incidence of cervical cancer occurs during a woman's reproductive years. Provision of treatment for cervical cancer that allows fertility preservation is therefore important. Trachelectomy removes the cervix but preserves the uterine body in women wishing to retain fertility.

Methods

Retrospective review of all cases (hospital IT systems interrogated) of all women undergoing trachelectomy between 2013 and 2021. Local data was then compared to published data to provide a benchmark.

Results

25 women underwent trachelectomy (5 simple, 20 radical) in Nottingham between 2013 and 2021. 15 women had involved margins of the pre-operative excised tissue but only 5 women had residual disease visible on pre op MRI. Post operatively histology revealed no residual disease in 19 women. 1 woman required a completion hysterectomy due to involvement of pelvic lymph nodes. There have been no recurrences or deaths from disease.

24 women had an intra-operative cervical cerclage sited. 15 women had a copper IUCD sited at time of operation to maintain patency of the os.

10 women have attempted to conceive, 6 women required fertility treatment. 5 women have achieved live births with 6 children born. 1 baby was pre-term.

Conclusions

Trachelectomy provides an oncologically safe treatment option for women with early stage cervical cancer wishing to preserve their fertility.

Hysterectomy with radiotherapy or chemotherapy or both for women with locally advanced cervical cancer.

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Aims

To compare hysterectomy with radiation or chemotherapy, or both, vs chemoradiotherapy in women with

Background

Standard care for LACC is chemoradiotherapy. It is uncertain if hysterectomy improves survival.

Methods

Cochrane review.

Results

We included eleven RCTs (2683 women) of different comparison groups-in two, we were able to do metaanalysis:

Hysterectomy with neoadjuvant chemotherapy vs chemoradiotherapy alone:

Meta-analysis (N=1253) of two RCTs found no significant difference in risk of death (overall survival) between NACT plus hysterectomy and chemoradiotherapy alone (HR 0.94, 95% CI 0.76 to 1.16). In both studies, the 5-year DFS in the NACT plus surgery group was worse (57%) compared with the CCRT group (65.6%), mostly for stage IIB.

Hysterectomy with neoadjuvant chemotherapy vs radiotherapy alone:

Meta-analysis of three RCTs of NACT and hysterectomy versus radiotherapy alone (N=571) found that women who received NACT plus hysterectomy had less risk of death (overall survival) than those who received radiotherapy alone (HR 0.71, 95% CI 0.55 to 0.93, $I^2 = 0\%$). However, a significant number of patients that received NACT plus hysterectomy had radiotherapy as well. There was no difference in the proportion of women with disease progression or recurrence between the NACT and the radiotherapy group (RR 0.75, 95% CI 0.53 to 1.05, $I^2 = 20\%$).

Conclusions

We found insufficient evidence that hysterectomy with radiotherapy, with or without chemotherapy, improves the survival of women with LACC treated with radiotherapy or chemoradiotherapy alone.

Small volume stage 1B1 cervical cancer: is radical surgery still necessary?

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Aims

To present survival data following extended follow up for patients who underwent conservative management of small-volume stage 1B1 disease.

Background

Standard surgical treatment of FIGO stage 1B1 cervical cancer is open radical surgery. However, several reports have shown that for small tumours a more conservative approach can be oncologically safe whilst reducing the morbidity associated with radical hysterectomy

Methods

All patients with FIGO stage 1B1 cancer and estimated tumour volume of less than 500mm3 in a loop biopsy specimen treated in Northern Gynaecological Oncology Centre between December 2000 and December 2021, were included in the study. Clinico-pathological and demographic data were collated alongside detailed follow-up outcome in conjunction with primary care and death register

Results

117 women underwent conservative management for small volume stage 1B1 disease. 58 women (49.5%) underwent fertility sparing conservative management with LLETZ while 59 women (50.5%) underwent simple hysterectomy. Overall, 95%(111/117) patients underwent bilateral pelvic lymphadenectomy and 1 positive node was identified. Accurate survival data were obtained in 98%(115/117) patients with median follow up of 8.5years (1-20). 4 patients died because of causes unrelated to cervical cancer and there was 1 recurrence (0.0085%, 1/117) identified in this cohort of patients

Conclusions

Cervical loop biopsy or simple hysterectomy combined with negative pelvic lymphadenectomy for small-volume stage 1B1 cervical cancer offers excellent prognosis in terms of survival. Should these results be verified by further prospective studies, radical surgery for these women may be avoided.

Growing Tumour Syndrome (GTS) – a case report of fertility-preservation and literature review of a rare entity.

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Aims

Describe the local experience of managing GTS in a 27-year-old patient at the Northern Gynaecological Oncology Centre (NGOC), Gateshead.

Review the published literature.

Background

GTS is rare, and characterized by peritoneal and omental implants composed of mature glial tissue¹. It is associated with immature ovarian teratomas, which account <1% of all ovarian teratomas and approximately 1% of all ovarian malignancies².

Methods

Case details from hospital records.

Literature search from electronic databases.

Results

The published evidence on GTS is scarce, with approximately 100 cases being reported, largely from case reports or retrospective case series, the largest of which includes 21 patients³.

We add to this literature our case report of a 27-year-old patient who presented 4 months postnatally in 2019 with bloating. Confirmed FIGO Stage 2B right ovarian immature teratoma was treated with fertility-preserving surgery (Right Salpingo-Oophorectomy and Omentectomy) in 2019 and 4 cycles of adjuvant BEP [Bleomycin, Etoposide and Platinum (Cisplatin)]. Follow-up was with imaging (CT).

2 years later she had laparoscopic biopsies of radiologically suspicious implants that showed mature glial tissue, diagnosing GTS. This resulted in further fertility-preserving surgical cytoreduction (right diaphragmatic stripping and small-volume excisions), and no further adjuvant treatment. Follow-up will continue radiologically.

Conclusions

GTS is an adverse prognostic factor that increases the likelihood of recurrence. Best management is by surgical cytoreduction to reduce the risk of future invasion. There is currently no evidence to recommend adjuvant chemotherapy.

Evaluation of the Impact of Age, Comorbidity and Frailty on Post-Operative Outcomes in Patients with Gynaecological Malignancy

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Aims

To investigate how patient age, frailty and comorbidity affects post-operative outcomes after major surgery for gynaecological malignancy.

Background

Surgery is the mainstay of treatment for gynaecological cancers. With the exception of cervical cancer which is more common in younger women, all other gynaecological cancers have their peak incidence in the postmenopausal age. It has been well documented that age >70, frailty and the presence of comorbidity are associated with adverse post-operative outcomes. 65% of patients who have surgery for gynaecological cancer in Leeds are aged >70. This project was undertaken to understand the impact of age, frailty and comorbidity on post-operative outcomes in the local population.

Methods

All patients who underwent major surgery for gynaecological malignancy at the Leeds Cancer Centre from April-September 2020 were included in this study. The post-operative outcomes of these patients were then compared to patient-specific demographics such as: age, comorbidities and frailty scores.

Results

165 patients underwent major surgery for gynaecological malignancy at SJUH during April-September 2020. Older age was associated with higher levels of comorbidity. Older patients were almost twice as likely to be readmitted (13% vs 7.2%), had a higher post-operative complication rate (24.4% vs 7.9%) and a longer hospital stay. Frailty score was not recorded.

Conclusions

Increased age and comorbidities correlated to poorer post-operative outcomes in patients undergoing major surgery for gynaecological malignancy. Frailty scoring was poorly recorded. Incorporating frailty scores and comprehensive geriatric assessment will help improve outcomes.

Vulvar cancer care provision and surgical service delivery in this high risk patient population during the COVID-19 pandemic

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Aims

To examine and demonstrate the feasibility of tertiary vulva cancer services during the COVID-19 pandemic.

Background

Recent research from the COVIDSurg collaborative has demonstrated significant delays the receipt of cancer surgery for many patients during the COVID-19 pandemic, and high morbidity and mortality amongst patients who acquire COVID-19 infection in the perioperative period, especially in patients over 70 years of age, having surgery for malignant disease, and with medical comorbidities such as obesity, diabetes and asthma. These findings are of particular importance when considering the management of patients with vulvar cancer, who often represent an older aged, medically comorbid, population.

Methods

Prospective consecutive identification of patients with malignant or premalignant disease of vulva from central multidisciplinary team meetings between 06/03/2020 - 26/03/2021, with collection of data pertaining to patient demography, perioperative care and outcomes, from patient medical records.

Results

85 patients were identified, with the majority aged over 60 years and either overweight or obese. Half had cardiovascular comorbidity, 12.9% had respiratory comorbidity, and 11.8% had diabetes. 92 operations were performed, involving 60 patients. 45.2% involved lymphadenectomy, and 14.1% involved plastic reconstruction. Length of stay was less than 7 days in 91.3% of patients. 34.8% suffered Clavien Dindo grade I or II complications, and 7.6% suffered grade III or IV complications. No patients were diagnosed with COVID-19 infection during the study period.

Conclusions

We have demonstrated the feasibility of maintaining tertiary vulvar cancer services, including complex surgical procedures, whilst minimising the risks to patients.

Clinical impact of the COVID-19 pandemic on vulval cancer management at the Northern Gynae Oncology Centre, Gateshead

Miss Aiste McCormick^{1,2}, Mr Stuart Rundle², Miss Nithya Ratnavelu²
¹Glasgow Royal Infirmary, Glasgow, UK, ²Northern Gynae Oncology Centre, Gateshead, UK

Aims

To assess the clinical impact of the first year of the pandemic on the management of new diagnosis of vulval cancer at Northern Gynaecological Oncology Centre (NGOC), a tertiary referral unit, in Gateshead, UK.

Background

COVID-19 has altered the management of patients with cancer due to changes in primary and secondary care, lockdowns and shielding. Patients with vulval cancer are frequently elderly, with multiple comorbidities and so were particularly vulnerable.

Methods

The management pathways for patients referred with new diagnosis of vulval cancer during the first 12months of the pandemic (01/03/2020-28/02/2021) were compared to those referred in the previous 12months (01/03/2019-29/02/2020).

Results

The number of new referrals was similar in both years (21 vs 24). During the pandemic the median referral to clinic review time was increased from 7 to 13 days and four patients (19%) had an initial telephone consultation. There was no delay in referral to CT or to surgery. Management with curative intent reduced from 87.5% to 62% and surgical management reduced from 100% to 81%. Patients presenting with stage 1 disease reduced from 65% to 35%, and surgical staging was incomplete in 30% compared to 13% of cases. 12 months survival fell from 83% to 71%.

Conclusions

During the first year of the pandemic a delay in review, a shift in the stage at presentation, an increase in palliative intent of management and poorer survival for patients with vulval cancer were observed.

Comparison of early endometrial cancer outcomes from a UK cancer unit and centre.

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Aims

To identify differences in overall survival (OS) or management in patients with early endometrial cancer (EC) in those treated at a UK cancer unit compared to a centre.

Background

Women with atypical endometrial hyperplasia (AEH) or presumed early stage EC (stage 1A, grade 1/2) are suitable for surgery at a cancer unit due to low rates of occult nodal involvement. Cancer centres also manage these cases due to complex co-morbidities, surgical challenges as well as their local unit patients.

Methods

A retrospective study of patients diagnosed with AEH and presumed early stage EC between 01/01/2015 to 31/12/2020. Data analysed includes age, route of surgery, OS, diagnostic grade, final grade, and staging.

Results

Overall 138 patients at KMH (unit) and 282 patients at RDH (centre) were identified. Patients at RDH were older compared to those at KMH (mean age 65.7 and 62.4 years, p=0.0001). Upstaging to centre level management occurred in 4% and 8.8% of cases at KMH and RDH respectively (p=0.096). Rates of minimal access surgery was greater at RDH (93.2% versus 68.1%) with no difference in OS (p=0.077).

Conclusions

UK patients with AEH and presumed early stage EC can be reassured there is no difference in OS between cancer unit and centre level management. However, there are benefits with centre level management with regards to increased rates of minimal access surgery. Sentinel node biopsy and genomic assessment may change thresholds for centre level management.

Immediate impact of Covid19 measures in patients with advanced ovarian cancer in NHS Lothian: A retrospective audit 2019-20

Dr Sarah Milliken¹, Dr James May¹

Aims

Evaluating primary treatment modalities and outcomes for patients with advanced ovarian malignancies presenting nine months either side of implemented Covid19 measures in NHS Lothian.

Background

SARS-CoV-2 was declared a pandemic in March 2020. Models predicted the impact of this respiratory virus would affect 2.3million cancer surgeries during the first peak (March-May 2020), either through delay or cancellation. Covidsurg gynaecological cancer international study reported 15% of women were affected by altered first-line management during the pandemic.

Methods

Electronic records were retrospectively reviewed and outcomes evaluated in patients with stage IIIC/IV ovarian cancer diagnosed between June 2019 and December 2020. Primary treatment measures, postoperative complications, hospital stay and mortality rates were compared between patients nine months either side of the nationally-imposed lockdown (March 2020)

Results

- 73 new cases advanced ovarian cancer over 18-month period
 - o 62 serous, 4 clear cell, 3 adenosarcoma, 4 mixed
- Pre-lockdown (n=46)
 - o 76.1% (n=35) primary surgery
 - o 23.9% (n=11) neo-adjuvant chemo
 - Mortality (1) small bowel ischaemia
 - Average inpatient stay = 11days
- Mid-lockdown (n=27)
 - 59% (n=16) primary surgery
 - o 41% (n=11) neo-adjuvant chemo
 - Mortality (0)
 - Average inpatient stay= 8days

Conclusions

Exceeded BGCS minimum surgery target (55%) despite change in practice due to Covid19 restrictions. Higher proportion of patients receiving NACT as first line therapy during first lockdown than prior to pandemic. Further analysis required of impact of pandemic on presentations and recurrence rates – immature data at present.

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A single centre experience in ovarian transposition

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Aims

To establish the indications and outcomes of patients undergoing ovarian transposition (OT) prior to pelvic radiotherapy

Background

OT is a recognised technique for fertility preservation and protection of ovarian function during oncological treatment (primarily pelvic radiotherapy).

Methods

Retrospective analysis of women undergoing ovarian transposition prior to pelvic radiotherapy between 2013-2020 (n=6).

Results

Median age at treatment was 26 years. 3 (50%) patients had no living children. The most common indication for radiotherapy was a gynaecological malignancy (cervical and vaginal) with 1 neurological tumour. OT was the sole surgical procedure in 4 women with 2 undergoing a hysterectomy at the same time. No significant post-operative complications were reported. 5 women received additional chemotherapy. 2 women experienced recurrence and died from progressive disease (stage 2B and 3A at diagnosis). No pregnancies have been conceived: 1 patient had oocyte retrieval prior to treatment but has not yet attempted pregnancy.

Conclusions

A decision to offer OT should be made on an individual basis weighing multiple factors. Routes to successful pregnancy are complex and should be discussed in depth. High rates of chemotherapy make it difficult to comment on the role of OT in preserving ovarian hormonal function. It is important to prospectively reflect on which patients suitable for this procedure give the low fertility and high cancer recurrence rates in this group. The British Fertility Society state that this procedure is most useful in women under age 30 who are receiving radiotherapy alone (<4 Gy).

Why women do not have surgical treatment for advanced stage ovarian cancer: Cohort study from East London Centre

<u>Dr Roisin Mulholland</u>¹, Miss Ellen Nelissen¹, Dr Camilla Richards¹, Mr Saurabh Phadnis¹ NHS Barts Health Foundation Trust, London, United Kingdom

Aims

This audit set out to identify women within Barts Health NHS Foundation Trust with stage 3/4 ovarian cancer who did not have surgical management, determine their demographics and the reasons for not having surgery.

Background

The Ovarian Cancer Audit Feasibility Pilot found that nearly 40% of patients diagnosed with ovarian cancer did not have surgical treatment with a large degree of geographical variation¹ highlighting the need to look at these discrepancies within each cancer centre.

Methods

Data was collected retrospectively from MDT proformas over a 5-year period (2016-2021) and analysed using Microsoft Excel and SPSS software.

Results

92 women who were diagnosed with stage 3/4 ovarian cancer did not have surgical treatment. 59.7% (55/92) had chemotherapy alone. The mean age was 76.2 years (55-100, n=92) and the mean Charlson Comorbidity Index was 9.9 (6-14, n=92). The majority of women had stage 4 disease (58.7%, 55/92) and high-grade serous pathology (83.7%, 77/92). The most common reason for not having surgery was unresectable disease (63%, 58/92) followed by poor performance status (40.2%, 37/92). Of those who did not have chemotherapy, the most common reason was poor performance status (59.3%, 16/27). 6.5% (6/92) had their treatment impacted by the COVID-19 pandemic.

Conclusions

WHO performance status is a surrogate marker of fitness for treatment. Further data is needed to correlate these findings with patient survival outcomes.

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Ovarian clear cell carcinoma presenting with ischemic stroke: report of two cases and literature review.

<u>Dr Onyinyechi Doris Onwuzurike</u>, Dr Radha Graham, Ms Nicola Macdonald, Dr Claire Frith-keyes, Dr Mari Thomas, Mr Ioannis Kotsopoulos

Aims

To report case management and review the literature.

Background

Malignancy can induce hypercoagulability and result in thromboembolic disease. Ovarian clear cell carcinomas are particularly thrombogenic.

Methods

Clinicopathological data were collected.

Results

The first case describes a 47-year-old patient who, following a pulmonary embolism, developed an extensive ischaemic stroke. Imaging additionally revealed a 23cm ovarian mass and disseminated intra-abdominal disease. She underwent bilateral salpingo-oophorectomy only due to intraoperative haemodynamic instability.

The second case describes a 68-year old-patient who presented acutely with slurred speech and unilateral weakness. An ischaemic stroke was diagnosed and she received thrombolysis. High D-Dimer prompted investigation for occult cancer. CT abdomen-pelvis identified a splenic parenchymal infarct and 7cm adnexal mass. Bubble echocardiogram revealed a patent foramen ovale. Despite anticoagulation, she developed a deep vein thrombosis and a further stroke and surgery was expedited. She underwent bilateral salpingo-oophorectomy and omentectomy, with omission of full staging to limit operative duration.

Pathology confirmed an ovarian clear cell carcinoma in both. Neither received adjuvant chemotherapy due to ongoing poor performance status. The first patient is alive with disease and the second is alive and well without evidence of recurrence.

Conclusions

Malignancy induced hypercoagulability may not be effectively controlled with anticoagulation alone and tumour resection is recommended. The multidisciplinary team balanced the timing and extent of surgeries with risk of peri-operative cerebrovascular complications. Both neurologists and gynaecological oncologists should be aware of this rare association.

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Impact of an advanced ovarian cancer pathway and tracker in women with stage 3/4 ovarian cancer

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Aims

To assess the impact of the advanced ovarian cancer pathway (AOCP) and tracker in women with stage 3/4 ovarian cancer.

Background

In May 2021 the South East Wales Gynaecological Oncology Centre introduced the AOCP and electronic patient tracker to pre-emptively manage patients through the treatment pathway.

Methods

To assess the impact of this service improvement, data were collected regarding treatment intervals and number of neoadjuvant chemotherapy (NACT) cycles before and after implementation of the AOCP tracker.

Results

Since implementation 36 patients have or are currently being tracked on the AOCP. Of the 18 patients who have completed tracking, 12 were not suitable for interval cytoreductive surgery following NACT. Data regarding treatment intervals were available for 10 patients who have undergone interval cytoreductive surgery. Data demonstrated a mean chemotherapy-to-surgery interval of 25 days (20-38 days) and mean surgery-to-chemotherapy interval of 28 days (21-38 days). Data from our historical cohort (n=31) prior to implementation of the AOCP tracker showed longer mean chemotherapy-to-surgery time of 39 days (20-108 days; p=0.055) and mean surgery-to-chemotherapy time of 42 days (21-182 days; p=0.164). Introduction of the AOCP tracker also reduced the mean number of cycles of NACT from 5 cycles pre-AOCP to 3 cycles post-AOCP (p=0.0003).

Conclusions

This multidisciplinary quality improvement project demonstrates that implementation of a simple electronic patient tracker can have a positive impact on the patient pathway by reducing treatment delays and avoiding excessive NACT cycles.

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Ultra-radical surgery for advanced ovarian cancer- a retrospective cohort study in a tertiary referral cancer center in the UK

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Aims

The aim of this study is to examine the morbidity and survival rates of ultra-radical surgery for advanced ovarian cancer performed in our unit.

Background

The standard of care in advanced ovarian cancer is a combination of surgery and chemotherapy including ultra-radical surgery in selected cases.

Methods

This is a retrospective study of 39 patients diagnosed with stage IIIA-IV ovarian and primary peritoneal cancer who underwent ultra-radical surgery in our unit between 2012 and 2020. The main outcome measures were the perioperative complications, the disease-free survival, the overall survival rate and the recurrence rate.

Results

21 patients were at stage III (53.8%) whereas 18 (46.1%) at stage IV. 14 patients underwent primary and 25 secondary debulking surgery. Major and minor complications occurred 17.9% and 56.4% of the patients, respectively. Complete cytoreduction following surgery was achieved in 24 cases (61.5%). The mean and the median survival time were 4.8 years and 5 years, respectively. The mean disease free survival time was 2.9 years while median disease free survival time was 2 years. Age (p=0.028) and complete cytoreduction (p=0.048) were found to be significantly associated with survival. Primary debulking surgery was significantly associated with lower probability of recurrence (p=0.049).

Conclusions

Our study indicates that ultra-radical surgery in centres with high expertise and a model of joint surgery may result in excellent survival rates with an acceptable rate of major complications.

A case of recurrent infected lymphocoele requiring surgical intervention

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Background

This is a case report of a patient with a recurrent infected lymphocyst requiring surgical intervention

Case

A 63 year old patient who was diagnosed with squamous cell carcinoma of the cervix stage 1B1 following a LLETZ procedure. The patient went on to have an open radical hysterectomy bilateral salpingoophorectomy and bilateral pelvic lymphadenectomy and was discharged day 4.

She was readmitted two months later with urinary retention and a lymphocyst that was drained under ultrasound guidance. She was discharged with a catheter for two weeks and a course of antibiotics for a confirmed urinary tract infection. The patient subsequently went on holiday where she was seen by a doctor with fever and a further ultrasound identifying a 5cm lymphocyst.

She was then readmitted once back in U.K with urinary retention, fever and pain. A further ultrasound guided drain. The patient continued having pyrexia despite multiple courses of intravenous antibiotics following removal of the drain. A further CT scan confirmed a 70x45x70mm lymphocyst.

A decision was made to conduct a laparoscopic drainage. The Retzius space was developed laterally to the cyst and was partially excised with it extending downwards towards the levator ani. The patient improved and was discharged on oral antibiotics.

Discussion

The incidence of lymphocoele varies between 1 to 58.5%. A study of 1175 patients found that incidence of infected lymphocyst was 2.98%. The first line treatment is considered to be percutaneous drainage with success rates documented at 90%.

Emergency management of a 72 litre ovarian cyst

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Background

This is a case of patient with an ovarian mass requiring emergency surgery which contained 72 litres of fluid.

Case

This 55 year old lady was admitted cachectic with an albumin of 25 and grossly distended abdomen. The initial impression was that of an ovarian carcinoma. A CT scan showed a large multiloculated cyst encompassing the whole abdomen. A Ca 125 was 734 and Ca 19-9 497. On day of the operation the patient was anaesthetically optimised with a blood transfusion and CTPA to rule out a pulmonary embolism. A supraumbilical laparotomy was conducted due to a large panus extending over her knees. Seventy two litres was drained from the cyst with total weight of 70Kg. She went on to have total abdominal hysterectomy, bilateral salpingoophorectomy and infracolic omentectomy.

The patient went on to have a turbulent time post operatively due to her cachexia, poor nutritional status and significant fluid shift. Due to difficulties in ventilating the patient went on to have a tracheostomy.

The final histology came back as a benign mucinous cystadenoma. She made a slow recovery in ITU but once discharged home her abdominal wall remoulded and went back to her previous baseline fitness.

Discussion

This case was complex based on difficulty in anaesthetic decision making due to her high risk perioperative mortality. This was highlighted with the challenges in the postoperative period in which a tracheostomy was conducted. Case reports have shown sudden death due to cardiorespiratory arrest due to large ovarian cysts.

Assessing the demand for prehabilitation in patients with advanced ovarian cancer undergoing cytoreductive surgery in Wales.

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Aims

To assess the need for prehabilitation in patients with ovarian cancer in Wales

Background

The benefits of prehabilitation are well recognised however effective, personalised prehabilitation requires detailed understanding of the needs of your population and data against which the impact of prehabilitation can be measured in the future. This project aims to provide this data.

Methods

This all Wales trainee collaborative project identified all patients with ovarian cancer who underwent PDS and NACT in 2018/2019 using CANISC. Data were collected including smoking, comorbidities, medications, Hb, BMI, albumin, post-operative complications, length of hospital stay and surgery to chemo interval.

Results and Discussion

236 patients were identified. 58% of patients were >65 years. 33% were obese. 9% were smokers. 92% had co-morbidites, with 20% of them currently taking >4 medications. 59% had an Hb <130, 25% had low albumin and 26% had a performance status of 2-3. The median length of stay post op was 5 days (range from 1-203 days). 48% of patients had a complication in the post-op period, although the majority were mild and short lasting.

Conclusion

Many of the patients identified were elderly, with multiple comorbidities and modifiable risk factors such as polypharmacy, smoking, anaemia and signs of poor nutrition. A personalised, multimodal prehabilitation programme has now been developed in Wales to target this population aiming to better prepare patients physically and emotionally for their treatment, reduce complication rates, length of stay in hospital and get patients to chemotherapy as soon as possible.

Vulvar squamous cell cancer: Does precursor lesion margin status affect recurrence-free survival after optimal surgical resection for early-stage disease?

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Aims

In this retrospective analysis we consider local data and assess recurrence-free survival time based upon resection margin precursor lesion status.

Background

Vulvar cancer accounts for ~4% of all gynaecological malignancies and most (>90%) are squamous cell cancers (SCC). These largely arise on a background of differentiated vulval intraepithelial neoplasia (dVIN) and/or lichen sclerosis (LS).

Methods

Patients with FIGO stage I vulvar SCC who underwent surgical management between January 2009 and December 2019 within NHS Lothian were included. Data including demographics, staging, margin status, adjuvant treatment, and recurrence-free survival were retrospectively analysed.

Results

123 patients with FIGO stage 1 vulvar SCC (n=33 1A, n=90 1B) were included. Median age was 63-years (range 30-91). 105 patients (85.4%) had an associated precursor lesion (dVIN and/or LS). Within the follow-up period, 33 patients (26.8%) had invasive recurrence, of which 24 (72.7%) had surgical resection margins which were positive for a precursor lesion. In patients with an acceptable microscopically clear invasive resection margin of >2mm the presence of a precursor lesion at the margin conveyed a higher risk of malignant recurrence when compared to those with a completely clear resection margin (HR 2.42 (95% CI 1.14 to 5.16)).

Conclusion

This study adds to the available literature emphasising the importance of comprehensive follow-up procedures and an earlier recourse to treatment of precursor disease in patients who have undergone optimal surgical treatment and who have persistent precursor disease at the resection margin.

A pilot study of interval cytoreductive surgery(CRS) and hyperthermic intraperitoneal chemotherapy(HIPEC) for advanced epithelial ovarian cancer(AEOC)

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Aims

We report early follow-up data on safety and feasibility of CRS and HIPEC in patients with AEOC.

Background

Interest in the role of HIPEC in addition to CRS in AEOC has grown over the past decade. The OVHIPEC1-trial showed longer recurrence free and overall survival for patients undergoing interval cisplatin CRS+HIPEC compared to CRS alone.

Methods

Patients with high grade AEOC who had achieved partial response to 3-4 cycles of neoadjuvant carboplatin-paclitaxel chemotherapy were selected for interval CRS+HIPEC. The procedure was performed by Gynaecological Surgical Oncologists in collaboration with Peritoneal Surgeons. Closed HIPEC delivery technique was used. Cisplatin was perfused at a dose of 100mg/m2.

Results

7 patients have undergone CRS+HIPEC for AEOC at The Christie since October 2021. Median time from chemotherapy to surgery was 28 days. Presurgical PCI score was 6-8, postsurgical PCI was 0 in 6 patients and 1 in 1 patient. Mean length of stay was 9 days including 1 CCU day. There were 2 intra-operative complications (ureteric injury, diaphragmatic defect) and 3 postoperative Clavien-Dindo grade II complications (PE, wound infection, UTI). There was no 30-day mortality.

Conclusions

Interval CRS+HIPEC is feasible and safe for AEOC in a tertiary cancer centre setting. Support of experienced peritoneal surgeons reduces the complex learning curve for these techniques. Mature data will be presented at the meeting.

Validation of pre-operative predictive models to determine suboptimal cytoreductive surgery and any residual disease in the treatment of advanced ovarian cancer (AOC)

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Aims

To externally validate the ability of pre-operative predictive models to determine the likelihood of suboptimal cytoreductive surgery (>1cm visible disease (VD)) and any residual disease (≤1 cm and >1cm) in treatment of AOC.

Background

In AOC optimal cytoreductive surgery (<1cm VD) is associated with improved survival. Survival rates in patients with a suboptimal cytoreduction are equivocal. Surgery can be extensive and associated with significant morbidity and mortality. Surgical complexity and patient comorbidity affect treatment planning. Pre-operative predictive models may provide an objective measure, to aid this decision-making process.

Methods

In 2018, 86 patients were treated for AOC in a London Teaching Hospital. 57 had cytoreductive surgery. 2 had incomplete records and were excluded. Suidan et al (2014, 2017) model's RS1 (suboptimal cytoreduction) and RS2 (any residual disease) were used to score patients against clinical and radiological criteria. Receiver operating characteristic (ROC) curve analysis was used to determine the accuracy of models.

Results

The optimal cytoreductive surgery rate was 89.09% (n=49). 83.64% (n= 46) had no visible disease (R0 resection). Both RS1 and RS2 models predicted surgical outcomes. RS1 AUC 0.854 (95% CI: 0.7793 to 0.9288, P<0.0001), RS2 AUC 0.8688 (95% CI 0.7975 to 0.9400, P<0.0001).

Conclusions

In our centre, Suidan et al's RS1 and RS2 models were able to predict cytoreductive outcomes. Predictive models can help determine patient suitability for cytoreductive surgery in AOC treatment.

Post Operative Telephone follow up of Endometrial Cancer

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Aims

To determine the efficacy of telephone-clinic follow up of endometrial cancer regarding:

- Rate of conversion to face-to-face review
- Feasibility of patient-led follow up
- Patient satisfaction

Background

COVID-19 has impacted the way hospitals operate around the UK. Routine follow up for low risk cases with high vulnerability to infection has led to the need to assess the need for tele-follow up. Multiple studies should that routine post-operative clinical review of endometrial cancer patients showed little to no survival benefits as majority of recurrence manifest as vaginal bleeding.

Methods

The data of all gynae-oncology outpatient clinic activity in the Royal London Hospital between November 2020 and June 2021 were recruited and reviewed. 276 patients who received primary treatment of endometrial cancer were included. To assess satisfaction, 200 patients were contacted via standardised online survey.

Results

52% of the patients had stage I disease. 11% had stage II disease. 272 out of 276 patients had no clinical indication of conversion to face-to-face clinic. 51 patients responded to the online survey showing 90% satisfaction rate with willingness for future telephone clinics. Free text feedback showed advantages of telephone follow up in terms of reduced infection risk, transportation burden, waiting time and time off work with increased flexibility.

Conclusions

Telephone follow up has shown to be a satisfactory method of following up Endometrial cancer patients with high satisfaction rate among patients.

FARGO-360: A multi-disciplinary survey of practice and perspectives on provision of care for frail patients presenting with gynaecological cancers in the UK and Ireland.

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Aims

To understand the current practice and perspectives of health care practitioners on care for frail patients with gynaecological cancers.

Background

Frailty has been associated with worse cancer-related outcomes for people with gynaecological cancers. Interventions targeted at improving physical strength, nutrition and cognition all have been shown to improve frailty. The lack of clear guidance on how to assess and modify this condition has the potential to lead to large variations in practice and outcomes.

Methods

Data was collected via a questionnaire-based survey distributed by the Audit and Research in Gynaecological Oncology (ARGO) collaborative to health care professionals in the United Kingdom or Ireland. Study data were collected using REDCap software hosted at the University of Manchester over a 16-week period between January-April 2021.

Results

Frailty scoring was not routinely performed in 63% of care settings, yet the majority of practitioners reported modifying their practice in frail patients. Only 16% of organisations surveyed had a dedicated pathway for assessment and management of frail patients. 37% of respondents reported access to prehabilitation services, 79% to enhanced recovery and 27% to community rehabilitation teams.

Conclusions

Practitioners from all groups surveyed felt that appropriate training, dedicated pathways for optimisation, frailty specific performance indicators and evidence that frailty scoring had an impact on clinical outcomes and patient experience would help to improve care for frail patients.

Management of ovarian cancer in the elderly: an age stratified study of a gynaecological cancer centre in Southern England

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Aims

Examine the patient characteristics, treatments and outcomes of elderly ovarian cancer patients within a single cancer centre cohort.

Compare and contrast the results with the National Ovarian Cancer Audit Feasibility Pilot Project (NOCAFP).

Background

50% of ovarian cancer is diagnosed in women over the age of 65. A major finding of the NOCAFP was that patients over the age of 80 years were much less likely to receive chemotherapy or surgery.

Methods

This was a retrospective cohort study of patients diagnosed with ovarian cancer between the ages of 65-69, 70-74, 75-80 and >80 years between January 1st 2017 and April 2020.

Results

One hundred and fifty eight patients were eligible for the study; 74% presented with stage 3 or 4 disease, 71% had a diagnosis of high grade serous carcinoma. There was no increase in the modified Charlson comorbidity index with increasing age. One year overall survival was 70.9%. The most frequently occurring treatment across all age groups was neoadjuvant chemotherapy and cytoreductive surgery. There was an association between increasing age and the chance of receiving no surgery or chemotherapy. There was no association between increasing age and post-operative residual disease.

Conclusions

Those eldest patients who underwent surgery were often selected for their low performance status and lack of comorbidities. However the survival of this age group was poor due to those who were too unwell of frail for any form of treatment.

Introduction of the day case hysterectomy in a cancer unit

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Aims

Establish a day case hysterectomy pathway for presumed stage 1a endometrial carcinoma and stage 1a1 cervical cancers or completion hysterectomies following LLETZ procedures.

Background

Since the start of the Covid-19 pandemic, the NHS has prioritised cancer care where possible. However, a shortage of resources such as beds during waves of more pathogenic variants, has commonly led to delays of treatment. As patients often postponed visits to primary care for symptoms of early cancer such as postmenopausal bleeding, gynaecologists have seen an increase in urgent cancer referrals and therefore the need for surgery as the pandemic diminishes.

Methods

A day case hysterectomy pathway was established by a multi-disciplinary team to maximise the chances of same day discharge such as: adequate pre-operative education, anaesthetic techniques such as total intravenous anaesthetic, keeping operative times to a minimum, an aggressive approach to nausea, vomiting and pain and early mobilisation. Patients were selected for day case hysterectomy on their motivation for day case surgery, social circumstances such as help at home and ability to engage with telephone follow up.

Results

Of 27 patients selected for day case hysterectomy, 9 were for cancer. Five had a diagnosis of presumed stage 1a endometrial cancer, 4 were completion hysterectomies following LLETZ procedures for 1a1 cervical cancer. Average age was 59 years (range 47-75), average BMI was 30(range 25-41). Six of 9 patients had an ASA grade of 2. Seven of 9 patients were discharged the same day as their procedure. No patients were readmitted within 30 days of surgery.

Conclusions

Malignancy is not a contra-indication for day case hysterectomy within the gynaecological cancer unit. Despite the association between endometrial adenocarcinoma and obesity, hypertension and diabetes mellitus, many of these patients can undergo day case hysterectomy safely.

An evaluation of a novel shared decision-making clinic in gynae-oncology at University College Hospital London, a tertiary referral centre.

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Aims

To evaluate the current use and outcomes of SDM clinic

Background

There is a growing cohort of multi-morbid patients being referred for surgery at UCLH, often suffering predictable complications related to their co-morbidities. We established an SDM clinic with same-day, face-to-face input from consultant surgeons, oncologists, anaesthetists, and clinical nurse specialists, aiming to:

- Provide an environment whereby patients' wishes are central to discussion, using SDM model documentation
- Assess and optimise patients' medical, psychosocial and functional needs, avoiding delays to surgery
- Evaluate perioperative risk using validated assessment tools, e.g. SORT, together with clinical expertise to guide decisions
- Assess frailty using validated tools
- Determine post-operative planned destination and utilisation of Enhanced Perioperative Care Services
- Reduce length of stay and post-operative complications

Methods

We retrospectively gathered data on the first fifty SDM clinic patients.

Results

The median age was 70 (58-79), the median BMI was 28.5 (25-37.25). 96% of patients had a SORT score calculated and 98% had a frailty assessment. 28% did not undergo surgery; 86% were joint decisions in clinic and 12% were because disease was too advanced.

Conclusions

The SDM clinic has excellent feedback from patients and staff, with patients making informed choices about whether to proceed with surgery. There is consistent use of mortality risk and frailty assessment. The results have helped guide future work:

- 1) linking with pre-habilitation and/or bariatric services for patients with options for alternative treatment or delayed surgery
- 2) developing a care of the elderly pathway, identifying and standardising the care of frail patients.

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Bowel surgery at primary and delayed debulking for advanced ovarian cancer – diagnostic accuracy of intra-operative assessment of disease. A review of 232 consecutive cases from a large UK cancer centre over a 7 year interval.

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Background

Bowel procedures at maximum effort cytoreductive surgery for advanced ovarian cancer significantly increase peri-operative risk and impact patient quality of life.

Aim

Evaluate correlation between intra-operative suspicion of bowel involvement with final histopathology, comparing primary (PDS) and delayed (DDS) debulking surgery.

Method

All patients undergoing PDS or DDS for stage IIIC/IV AOC in a single cancer centre between 2014-2021 identified and electronic care records reviewed.

Results

n=232. 45.3% PDS; 54.7% DDS. At PDS – 87 large bowel resections performed, PPV 0.94; and 11 small bowel resections, PPV 0.82. At DDS – 60 large and 10 small bowel resections, PPVs 0.85 and 0.70. At PDS – rectosigmoid, descending, transverse and ascending colon resections in 35.2% (PPV 0.97), 5.7% (PPV 1.00), 4.8% (PPV 0.80) and 37.1% (PPV 0.92) of patients. At DDS – recto-sigmoid, descending, transverse and ascending colon resections in 25.2% (PPV 0.88), 10.2% (PPV 0.85), 11.8% (PPV 0.80) and 9.4% (PPV 0.83) respectively. Jejunal and ileal resection at PDS in 3.8%, PPV 1.0 and 6.7%, PPV 0.71; and at DDS in 0.8%, PPV 0 and 7.1%, PPV 0.78. Excision of large bowel nodules at primary and delayed surgery PPVs of 0.85 and 0.75; and small bowel nodules PPVs of 0.86 and 0.82. Appendicectomy in 35.2% of PDS, PPV 0.65; and 17.3% of DDS, PPV 0.86

Conclusion

Less bowel surgery performed following NACT. At both PDS and DDS, positive correlation between intraoperative assessment and final histopathology likely in part reflects surgeon understanding of sequelae of bowel surgery, undertaking only when suspicion of involvement strong.

Correlation between intra-operative suspicion of lymphatic involvement at maximum effort cytoreductive surgery for advanced ovarian cancer and final histopathology – comparing primary and delayed debulking outcomes. A review of 232 consecutive cases from a large UK cancer centre over a 7 year interval.

<u>Dr Susan Addley</u>¹, Mr Mark McGowan¹, Dr Amoy Johnson¹, Dr Harriet Crossland¹, Mr Viren Asher¹, Mr Anish Bali¹, Mr Summi Abdul¹, Mr Andrew Phillips¹

Background

Removal of enlarged lymph nodes (LN) at ultra-radical surgery for advanced ovarian cancer confers survival benefit. Given the surgical risk and long-term morbidity associated with lymphadenectomy, however, unnecessary LN dissection is to be avoided. Intra-operative assessment to differentiate between malignant and reactive lymphadenopathy poses a diagnostic challenge.

Aim

Evaluate the correlation between intra-operative suspicion of abdomino-pelvic lymphatic involvement with final histopathology, comparing findings for primary (PDS) and delayed (DDS) debulking surgery.

Method

All patients undergoing PDS or DDS for stage IIIC/IV AOC in a single cancer centre between 2014-2021 were identified and electronic care records reviewed retrospectively.

Results

n=232. 45.3% PDS; 54.7% DDS. At PDS, 21.9% of patients had enlarged pelvic LN removed, PPV 0.61. By comparison, pelvic lymphadenectomy was performed in 7.9% at DDS, PPV 0.60. Suspicious para-aortic LNs were dissected in 24.8% at PDS, PPV 0.73; and in 11.8% at delayed debulking, PPV 0.80. At primary surgery, 12.4% had coeliac axis nodes debulked, PPV 0.54; and 11.0% at DDS, PPV 0.57. Cardio-phrenic LN removal was undertaken in 12.4% at PDS, PPV 0.85; and in 15.7% at interval surgery, PPV 0.70.

Conclusion

More lymphadenectomy was performed at PDS – likely reflective of chemotherapy-induced shrinkage and fibrosis of previously enlarged nodes, becoming no longer clinically palpable at time of DDS. Correlation between surgical suspicion of LN involvement and final histopathology was similar for each nodal bundle between primary and delayed surgery; but overall greatest for CPLN at PDS, PALN at DDS; and poorest for coeliac axis nodes at both.

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The incidence of radiologically-diagnosed incisional hernia following maximum effort cytoreductive surgery for advanced ovarian cancer. A review of 114 consecutive cases over a 4 year period from a large UK cancer centre.

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Background

Maximum effort cytoreductive surgery for advanced ovarian cancer nesecitates an extensive midline incision to facilitate adequate surgical access to the upper abdomen. An incisional hernia rate of 10-20% following midline laparotomy is reported; with hernia recurrence rate as high as 60% after repair.

Methods

All patients with stage IIIC/IV tubo-ovarian carcinoma undergoing either primary (PDS) or delayed (DDS) debulking surgery between 2014-2017 were identified. Standard approach to PDS/DDS within our centre entails incision from pubis-xiphisternum, followed by rectus sheath closure using continuous non-locking PDS. All available post-operative imaging reports were reviewed, capturing radiologically-diagnosed incisional hernia.

Results

n=114. 53.5% underwent PDS and 46.5% DDS. 19.3% developed incisional hernia, identified on imaging at mean interval of 1.69 years from surgery. 95.1% of such were diagnosed by year 3 post-operative. Incidence was greater following DDS, 26.4% versus 13.1% after PDS; but this difference not significant (P>0.05). Age; SCS; EBL; post-operative wound infection, ileus, pneumonia did not significantly impact future hernia risk (P>0.05).

Discussion

Data is limited by availability of interval imaging. An incisional hernia rate of 19.3% concurs with current literature. DDS may be associated with greater risk, attributed perhaps to impaired tissue healing post-chemotherapy. We suggest, however, in the context of a standard approach to surgical incision and closure, hernia risk remains constant across various peri-operative variables.

Conclusion

With potential impact on body image; need for corrective surgery if symptomatic; and high hernia recurrence rate despite repair – this long-term surgical complication should be discussed with all patients undergoing cytoreductive surgery.

An incidental finding of synchronous TCC in redundant ureteric stump in patient with early-stage endometrial cancer and previous ipsi-lateral nephrectomy

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Background

Primary ureteric tumours are rare, accounting for <6% of tumours of the upper urinary tract. The most common histopathological subtype is transitional cell carcinoma (TCC). Lynch syndrome is characterised by germline mutations in DNA mismatch repair (MMR) genes – conferring predisposition to a spectrum of malignancies including endometrial, colorectal and urinary tract cancers. Patients with Lynch syndrome have a 5% lifetime risk of developing a renal or ureteric tumour.

Aim

We present a patient with early-stage endometrial cancer – with incidental finding of TCC within a redundant ureteric stump in the context of previous ipsilateral nephrectomy.

Case discussion

A 78 year old presented with post-menopausal bleeding. Previous left nephrectomy for renal calculi. Endometrial biopsy diagnosed grade 1 endometrioid adenocarcinoma. Staging MRI and CT reported radiologically stage 1A disease; but also identified soft-tissue distension of the redundant left ureter. CT-PET to further evaluate confirmed a co-existing 2.5cm FDG-avid distal left ureteric tumour.

TLH and BSO were performed. Concurrent cystoscopy and ureteroscopy were undertaken by Urology, visualising tumour within the left ureteric stump. Laparoscopic ureterolysis was performed and the distal end of ureteric remnant cut flush to bladder. To complete ureterolysis and excision proximally, approach was converted to open to facilitate access to the scarred nephrectomy site. Final histopathology confirmed MMR-deficient grade 1 stage 1A endometrioid adenocarcinoma with synchronous poorly-differentiated TCC left ureter.

Conclusions

Pre-operative suspicion of synchronous tumours allows appropriate patient counselling and coordination of multi-speciality input. Multiple cancer diagnoses should prompt consideration of genetic predisposition and appropriate screening for relevant syndromes.

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The feasibility of radical debulking video-assisted thoracic surgery (VATS) in advanced ovarian cancer: A preliminary case from a UK cancer centre

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Background

70% of patients with advanced ovarian cancer (AOC) and moderate-large pleural effusion at presentation will have macroscopic chest disease. Whilst cardio-phrenic LN dissection has become an accepted approach to debulking para-cardiac lymphadenopathy – more extensive thoracic exploration and resection remains novel.

Aim

We share a case and images of video-assisted thoracic surgery (VATS) performed for stage IV AOC.

Case discussion

A 61 year old presented with bloating, breathlessness and CA125 of 209. CT identified a large right-sided pleural effusion, with basal lung and mediastinal nodularity. No ascites, nor pelvic masses – only small volume peritoneal thickening of the left para-colic gutter. Pleural tap confirmed metastatic HGSC of primary tubo-ovarian/peritoneal origin. Following six cycles of NACT, as the only residual disease being persistent and diffuse pleural thickening, two-stage ultra-radical surgery planned.

An initial VATS procedure was performed jointly by a gynaecological-oncology and thoracic surgeon. On thorascopic assessment – miliary disease of the entire pleura, including overlying diaphragm, was visualised. Large plaques were also identified on the right apical (8.5cm) and lower lobes (9.5cm, 11cm); and overlying segment 6 (3.3cm) – all of which were removed by wedge resection; along with pleural stripping, excision of a pericardial nodule and full thickness diaphragmatic resection. Patient was discharged home day 3. Histopathology confirmed HGSC involving all surgical specimens.

Conclusions

In select cases of AOC with extensive chest involvement at presentation, VATs may represent a feasible approach to complete thoracic exploration and debulking – ensuring that, in combination with abdomino-pelvic surgery, R0 is confidently achieved at *all* disease sites.

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Diagnostic accuracy of upper abdominal procedures performed at maximum effort cytoreductive surgery for advanced ovarian cancer — a comparison of primary and delayed debulking. 232 consecutive cases over a 7 year period from a large UK cancer centre.

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Background

The goal of cytoreductive surgery is no residual disease. Diagnostic challenge exists, however, in differentiating disease from other tissue pathologies – inflammation, fibrosis or post-chemotherapy change; as surgeons strive to balance maximal surgical effort with avoiding unnecessary procedures.

Aim

Evaluate the correlation between intra-operative suspicion of upper abdominal disease with final histopathology, comparing findings for primary (PDS) and delayed (DDS) debulking surgery.

Method

All patients undergoing PDS or DDS for stage IIIC/IV AOC in a single cancer centre between 2014-2021 were identified and electronic care records reviewed retrospectively.

Results

n=232. 45.3% PDS; 54.7% DDS. At PDS, 176 upper abdominal procedures were performed; 375 at interval surgery. Peritoneal stripping was undertaken in 48.6% at PDS, PPV 0.90; and 63.0% at DDS, PPV 0.71. At PDS, 28.6% had diaphragmatic stripping and 2.9% full thickness diaphragm resection; PPVs 0.90 and 0.67 respectively. Performed in 63.8% and 26.0% of DDS by comparison, PPVs 0.86 and 0.45. 2.9% underwent cholecystectomy at primary surgery, PPV 1.00; and 11% at DDS, PPV 0.64. 13.3% of PDS included splenectomy, PPV 0.86; compared with 23.6% of DDS cases, PPV 0.77. Excision of liver capsular disease/liver resection were undertaken at primary debulking in 7.6%, PPV 0.75; and at 8.7% of DDS, PPV 0.45.

Conclusion

Upper abdominal procedures are undertaken more often at DDS than PDS, but with intra-operative suspicion of disease having poorer correlation with final histopathology – likely reflecting the diagnostic challenge of differentiating true disease from post-chemotherapy change; as well as potential impact of NACT on final histopathological assessment.

Cervical cancer mimicking primary oesophageal cancer at presentation: A rare pattern of spread and the diagnostic challenges

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Background

Cervical cancer follows a predictable pattern of local infiltration and step-wise lymph node involvement. Distant parenchymal metastasis, representing stage IV disease, typically favour the liver or lung. Gastro-oesophageal metastases are rare – occurring in <2% of patients with advanced disease.

Aim

We share a case of cervical cancer mimicking primary oesophageal carcinoma – highlighting this atypical presentation and diagnostic challenges posed.

Case discussion

A 23 year old presented with gradual onset dysphagia. At oesphagogastroduodenoscopy, significant stricturing of the upper third of oesophagus was encountered. Biopsy confirmed squamous cell carcinoma (SCC). An isolated oesophageal tumour was identified on subsequent staging CT and CT-PET. Following jejunostomy and chemoradiation, oesophagectomy was performed. Final staging T3NO.

Three months post-operatively, patient re-presented with heavy PV bleeding. A 5cm cervical tumour was found on examination and further SCC diagnosed on biopsy. MRI reported parametrial extension.

The diagnosis of two discrete foci of SCC in quick succession prompted review of previous oesophageal histology. Additional p-16 immunohistochemistry re-classified upper GI disease as in fact representative of metastases of cervical origin. On review of index imaging, gross cervical tumour was not obvious on original CT-pelvis. On CT-PET, the degree of pelvic uptake was agreed as in keeping with that expected in premenopausal women.

Conclusion

Oesophageal carcinoma in a young patient without overt risk factors should prompt scepticism and consideration of a potential underlying metastatic process. The value of CT-PET in this young population may be hindered by the challenge of differentiating physiological from pathological avidity of the genital tract.

Downstaging of FIGO 2009 IB cervical cancer based on the latest (FIGO 2018) system, what happens to the nodal status?

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Aims

To investigate if 'downstaging' of IB cervical cancers (FIGO 2009) to IA based on the new FIGO (2018) staging system is appropriate to guide management when the pelvic lymph nodes are considered.

Background

In 2018, FIGO released an updated staging system for cervical cancer. Previously based on clinical examination (FIGO 2009), the updated staging system formally incorporates imaging modalities and pathology into the staging of cervical malignancies. One of the key changes in staging is that the horizontal dimensions of the tumour are 'no longer considered in defining the upper boundary of a stage IA carcinoma,' leading to the downstaging of certain IB (FIGO 2009) tumours to IA (FIGO 2018).

Methods

Retrospective analysis of all cases of IB (FIGO 2009) cervical cancer between 2014 and 2019 within the West of Scotland Regional MDT (n=152). These cases were re-staged in keeping with FIGO 2018 staging and, where pathology data was available, lymph node status was considered.

Results

In total, 27% (N=41) of the tumours were downstaged from IB to IA. Of these, 8% (n=4) had positive pelvic lymph nodes.

Conclusions

In our dataset, a significant number of downstaged patients had positive pelvic lymph nodes, despite being appropriately provisionally staged as IA tumours based on 2018 staging. Amongst this cohort of patients, there were higher rates of lymphovascular space invasion within the primary tumours.

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The fine line between mesonephric hyperplasia and mesonephric adenocarcinoma - a case report

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Aims

Case Report

Background

Mesonephric adenocarcinoma is a rare HPV-independent cervical carcinoma which can be near impossible to differentiate from florid mesonephric hyperplasia.

Case

A 73 year old woman underwent Large Loop Excision of Transformation Zone (LLETZ) for biopsy proven Cervical Intraepithelial Neoplasia (CIN) III. Histology showed completely excised CIN III together with an abnormal florid proliferation of mesonephric glands with a differential diagnosis between florid diffuse mesonephric hyperplasia and mesonephric adenocarcinoma. Imaging revealed no cervical mass nor evidence of extra-cervical disease. Specialist Multi-Disciplinary Team (sMDT) recommended repeat LLETZ.

Both LLETZ specimens showed similar features with extensive involvement by bland mesonephric glands (GATA3 positive, ER negative) with a focal lobular architecture and a lack of significant nuclear atypia, glandular confluence or stromal reaction. Molecular testing revealed no mutations in KRAS, NRAS or other genes, mutations which are present in most, but not all, mesonephric adenocarcinomas. Expert opinion favoured florid mesonephric hyperplasia but could not definitively exclude mesonephric adenocarcinoma.

sMDT recommended simple hysterectomy with the acceptance of risk of under-treatment. Histology revealed mesonephric hyperplasia but no features of mesonephric adenocarcinoma. There was no evidence of disease clinically or radiologically six months post-surgery and the patient was discharged.

Conclusion

With rare and complex cases, the whole clinical and pathological picture should be correlated and expert opinion may be valuable.

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A case report of a pelvic mass following total abdominal hysterectomy and bilateral salpingo-oophorectomy with intravascular leiomyomatosis.

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Aims

We present an unusual case of a large pelvic mass developing shortly after a total abdominal hysterectomy and bilateral salpingo-oophorectomy with benign histology.

Introduction

The most common cause of a pelvic mass in a female is leiomyomas. There are many other causes that must be considered, especially when the presentation and imaging are atypical.

Methods/ case report

A 57-year-old female presented with urinary retention and loose stools: CT-KUB found bilateral hydroureteronephrosis due to a large pelvic mass. She had previously undergone a total abdominal hysterectomy, bilateral salpingo-oophorectomy and lymph node sampling for suspected ovarian cancer. Unexpectedly, the post-operative histology showed benign pathology of adenomyosis, endometriosis, and leiomyomatosis with intravascular invasion. Whilst awaiting further staging, she re-presented with heavy vaginal bleeding and raised inflammatory markers. She was treated with intravenous antibiotics and tranexamic acid, along with supportive care.

Results/ outcome

Vaginal biopsy showed no evidence of malignancy, however subsequent imaging showed progressive disease. The patient deteriorated with sepsis and a pulmonary embolism, and a biopsy of the mass could not be obtained. She was transferred to a hospice for ongoing supportive care.

Conclusions

Intravascular leiomyomatosis and leiomyosarcoma are rare conditions, especially following hysterectomy. There are case reports in the literature of both benign and malignant disease recurrence following hysterectomy, demonstrating that these are important differentials to consider and suggests that patients with atypical histology would benefit from recurrence monitoring.

MMR Testing in Endometrial Cancer: A Tertiary Cancer Centre Audit

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Aims

Audit the practice of Lynch syndrome investigation in patients diagnosed with endometrial cancer.

Background

NICE Guidelines (October 2020) recommend mismatch repair (MMR) deficiency testing in all cases of endometrial cancer, and MLH1 promoter hypermethylation testing in cases of MLH1 loss.

Methods

We identified all cases of endometrial cancer diagnosed at our centre from December 2020 to November 2021, compiling data from a histopathology reporting platform, electronic patient records, and genetic referral portal. 164 cases fitting the inclusion criteria were identified, 75 of which were referrals from cancer units.

Results

MMR protein immunohistochemistry (IHC) was performed for 117/164 cases (71%). The 47 cases without MMR IHC included 7 local cases and 40 referrals. MMR deficiency was found in 32% of tested cases (37/117). 8 cases showed loss of PMS2 alone, MSH2 and/or MSH6. 23/29 cases with loss of MLH1 were sent for methylation testing. 16/23 cases showed MLH1 promotor hypermethylation and 2/23 showed no detectable methylation. The remainder were undocumented or pending results. The mean time from specimen receipt to MMR IHC report was 15 days, and to methylation report was 151 days.

Recommendations

- 53% of referred cases did not have MMR protein IHC performed. This needs to be discussed with local MDTs.
- 1. Mean time taken for hypermethylation reporting was 151 days. A streamlined protocol for referring cases for methylation testing needs to be implemented, including timely documentation of the results and referral to clinical genetics, if required.

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Sebaceous carcinoma (SC) of the vulva – A Case report and literature review

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Aims

To describe a case of extraocular sebaceous carcinoma of the vulva in a woman with persistent vulval symptoms.

Background

Sebaceous carcinoma (SC) is a rare cutaneous malignancy arising from sebaceous glands most commonly in the periocular region. Very rarely, it occurs in the vulva. There are 12 cases published in the literature. We present a case of 59-year-old woman with a diagnosis of SC of the vulva.

Methods

Review of the patient's case notes, external expert histopathology opinion and published literature.

Results

The patient first presented at 51 years with vulval itching and soreness. She underwent wide local excision (WLE) of the lesion which confirmed high grade vulval intraepithelial neoplasia (VIN 3). Over the years, she had several biopsies for persistent vulval symptoms. Interestingly, patient's symptoms were exacerbated with use of topical/systemic steroids. All biopsies showed similar histology of VIN 3. At 57 years, further WLE showed a stage 1A squamous cell carcinoma of the vulva (completely excised). At 59 years, vulval biopsies were taken for ongoing symptoms. An external histopathological review confirmed extra-ocular SC. She underwent anterior vulvectomy for the diffuse lesion and is now planned to undergo a bilateral groin lymph node dissection as histology showed poor differentiation and lymphovascular space invasion.

Conclusions

This is the 13th case reported of SC of vulva. In women with persistent vulval symptoms, it's crucial to consider in differential diagnosis and to seek expert histopathological opinion when suspected.

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Long term outcomes of borderline ovarian tumours - The South East Wales Gynaecological Oncology Centre Experience (SEWGOC)

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Howells¹, Dr Gareth Rowlands³, Mrs Anju Sinha¹, Dr Aarti Sharma¹

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Aims

The aim of this service evaluation is to assess our current management and long-term outcomes/follow up in women diagnosed with borderline ovarian tumours (BOT) over a ten-year period.

Background

BOT are low malignant potential tumours. There is no consensus on how best to follow up those patients.

Methods

All women with confirmed histological diagnosis of BOT who underwent primary surgery at SEWGOC between 1st January 2007 to 31st December 2016 were included. Retrospective review of patients' electronic medical records was undertaken. Information regarding FIGO stages, management (fertility preserving surgery/pelvic clearance), follow up and recurrence were analysed.

Results

Seventy nine patients were diagnosed with BOT. The mean age was 48 years(range 18 – 86). Of these, 67 were stage I, 4 stage II and 8 stage III. Fertility sparing surgery (mean age 47) was performed in 32 patients (30 stage I, 2 stage III). Of these, 22 had follow-up. Four of 32 (12.5%) had recurrences. Pelvic clearance (mean age 55) was undertaken in 47 patients. Of these, 23 had follow up. Three of 47 (6%) patients presented with recurrence. All recurred within 5 years.

Conclusions

This evaluation shows that recurrence in women who undergo fertility sparing surgery is doubled versus pelvic clearance. All patients with recurrence presented with symptoms within 5 years of initial surgery. Symptomled follow up could be a suitable modality especially in those who underwent pelvic clearance.

Preliminary results of an endometrial cancer PIFU education clinic

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Background

Patient initiated follow up (PIFU) describes when a patient can initiate follow-up appointments when required, e.g. when symptoms change. We identified our target patients according to the British Gynaecological Cancer Society recommendations and guidance on patient-initiated follow-up (PIFU)¹.

Methods

We set up an education clinic in which suitable patients would be seen after referral to PIFU. The clinic included information on PIFU, completion of a holistic needs assessment, a treatment summary, discussion of trigger symptoms and information on how to contact the service. Patients had either had surgery alone or surgery plus adjuvant radiotherapy for endometrial cancer. 33 patients were seen in the education clinic between 01/4/21 and 31/12/21.

All were sent a website link and a QR code after the education appointment and asked to complete a feedback form regarding their experience of the clinic.

Results

6 responses received (18% return rate)

All said they were given the right amount of written information, were told about the danger signs, and were told who to contact if they had concerns.

All patients described the experience as "very good"

4 patients answered "No" to the question "Was there anything that could have been improved?"

2 patients made contact with service after the appointment, both were booked to see the consultant within 2 days of contact.

Conclusion

Although there was a low response rate to the feedback questionnaire, the feedback was positive. Results showed that PIFU was well received, safe and patients felt that they were given all the necessary information.

References

 Newton C, Nordin A, Rolland P et al. (2020) British Gynaecological Cancer Society Recommendations and guidance on patient-initiated follow-up (PIFU) International Journal of Gynaecological Cancer, 0, 1-6

Tele-oncology during the COVID-19 pandemic

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Aims

To explore the views of patients with gynaecological cancers around remote consultations versus face-to-face appointments.

To learn how remote consultations could be improved

To identify situations/patients who are not suitable for remote consultation

Background

During the COVID-19 pandemic, NHS hospitals have had to adapt quickly to a number of challenges, including a greater reliance on digital technology. Prior to this, remote consultations were not widely used in oncology, not evidence based and often limited to surveillance of low risk patients. This study investigates patient satisfaction with remote consultations including patients undergoing treatment or who have active symptoms.

Methods

A mixed methods study combining quantitative analysis of an online questionnaire with thematic analysis of semi-structured online interviews conducted during the COVID-19 pandemic.

Results

186 patients completed the questionnaire. Overall, 46% patients felt happy with remote consultations. Differences in satisfaction between age groups and cancer status were noted. Most patients would prefer a face-to-face appointment if COVID were not a risk. Those who were unhappy felt quality of care was not the same and appointment times were shorter. Travel time/cost was not an important factor. Many patients felt comfortable discussing symptoms and worries over the phone but most weren't comfortable receiving results or bad news over the phone.

Conclusions

Over half of patients were dissatisfied with remote consultations for a variety of different reasons and this data highlights which situations were least satisfactory and areas where the patient experience could be improved.

Evaluation of Medical Oncology Nurse Led telephone follow up clinic at Northern Centre for Cancer Care

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Aims

Primary aim: to evaluate nurse-led follow-up services following chemotherapy for treatment of ovarian malignancy with emphasis on holistic care and overall patient satisfaction.

Secondary aim: to explore patient views to facilitate implementation of (PIFU).

Background

Expansion of available systemic therapies and greater treatment options at relapse has resulted in saturation of existing medical oncology services. Service diversification with stratification of patients was needed. A telephone nurse-led follow-up service was initiated, evaluated and used to explore feasibility and acceptability of PIFU.

Methods

A mixed method approach was taken with semi-structured interviews, undertaken by a non-clinical researcher, based around a formulated topic guide. Categorical data was expressed numerically with broad thematic analysis of transcribed interviews.

Results

27/27 (100%) patients in nurse led follow up were interviewed with a median age of 75 years (45-85). 63% had advanced stage disease.

Clear preference for the initial appointment to be in person was shown but, after enrolment in telephone service. 100% would recommend this approach. Patients also felt holistic needs were being met by the service.

48% of patients subsequently agreed to PIFU with qualitative interviewing informing decision-making tools to support transition.

Retrospective review of consultation data demonstrated >3000 minutes saved of consultant time over a 7 month period.

Conclusions

The nurse-led service is an integral part of the medical oncology follow-up pathway with time- and cost-saving for the service alongside enhanced patient care.

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