

T4b tumours. With experience, robotic en-bloc multi-visceral resection of locally advanced rectal cancers is feasible and oncologically safe. The robotic approach allows the benefits of the minimal access approach to be extended to this group of patients.

#### Abstracts for BASO Trainees Poster Presentation at the BASO Skills Day on Saturday, 16<sup>th</sup> November 2019

4.

##### INVASIVE BREAST CANCER OVER FOUR DECADES REVEALS PERSISTING POOR METASTATIC OUTCOMES IN TREATMENT RESISTANT SUBGROUP – THE “ATRESS” PHENOMENON

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Major advances in breast cancer care have led to a noteworthy reduction in mortality. However, there are still women who are not cured. Therefore, we hypothesised there is a sub-group of treatment-resistant women who succumb to their disease early.

Between January 1<sup>st</sup>, 1975 and December 31<sup>st</sup>, 2006 5,392 women underwent surgery for primary operable invasive breast cancer at Guy's Hospital, London, UK. Data on patient demographics, tumour characteristics, treatment regimens, recurrence, and mortality were prospectively recorded. We considered four time periods (1975–1982, 1983–1990, 1991–1998, 1999–2006). Time to event analysis was performed with Cox proportional hazards model and Kaplan-Meier estimation.

The unadjusted hazard ratio for developing metastasis and overall mortality relative to the 1975–1982 cohort decreased steadily to 0.21 and 0.77, respectively in 1999–2006. However, the metastasis-free interval shortened, with the proportion of women developing metastasis  $\leq 5$  years increasing from 73.9% to 83.0%. Furthermore, median survival following the detection of metastasis decreased from 1.49 years in 1975–1982 to 0.94 years in 1999–2006. A filter based on the St. Gallen criteria for high-risk patients and grade 3 tumours identified the presence of  $\pm 200$  patients in each of the time periods who developed metastasis early and died within a much shorter time frame.

Advances in treatment have decreased the risk of metastasis and improved survival in women with invasive breast cancer over the last 40 years. Despite this, a subpopulation with shorter distant disease-free and overall survival remains. This subgroup may considerably overlap with women harbouring an underlying genome-based treatment resistance signature.

6.

##### CARDIOPULMONARY EXERCISE TESTING AND ANAEROBIC THRESHOLD: AN EFFECTIVE WAY TO JUDGE FITNESS FOR MAJOR HEPATOBILIARY SURGERY FOR UPPER GI MALIGNANCY?

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**Background:** Cardiopulmonary exercise testing (CPET) is a pre-operative risk stratification tool utilising factors such as the anaerobic threshold (AT). Evidence suggests that patients undergoing major hepatobiliary surgery with an AT  $< 11$  ml/kg/min are at increased risk of post-operative morbidity and mortality. This review aims to compare outcomes in patients with a pre-operative CPET with a AT  $> 11$  ml/kg/min against those  $< 11$  ml/kg/min.

**Methods:** Patients who underwent major hepatobiliary surgery for upper GI malignancy with a pre-operative CPET between January 2016 and December 2018 were reviewed. 18 patients were identified, six had an AT  $> 11$  ml/kg/min (group A) and 12 had an AT  $< 11$  ml/kg/min (group B). Primary outcomes were length of stay and 30-day mortality.

**Results:** There was no significant difference in age (74.3 years vs 71.5 years,

$p=0.42$ , all results expressed as group A vs B). There was a significant difference in AT (12.6 ml/kg/min vs 9.2 ml/kg/min,  $p=0.0001$ ). There was no mortality at 30 days in either group and a non-significant longer length of stay (21 days vs 13.5 days  $p=0.20$ ).

**Conclusions:** This review was unable to demonstrate that patients with a AT  $< 11$  ml/kg/min were at increased risk of prolonged hospital stay or 30-day mortality. Further prospective studies with larger patient numbers are warranted.

7.

##### A DAILY DIAGNOSTIC MULTIDISCIPLINARY TEAM MEETING TO REDUCE TIME TO DEFINITIVE DIAGNOSIS IN THE CONTEXT OF BONE AND SOFT TISSUE SARCOMA

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**Introduction:** Cancer services are under increasing pressure to deliver waiting time targets. Our service has seen referral numbers increase to over 3000 per annum, with more than 80% coming from secondary care. In order to deliver a responsive service, the department has introduced a daily diagnostic multidisciplinary meeting (DMDT) with the aim being stratification of resources by directing rapid access to clinics and diagnostics to those felt to be at greatest risk of malignancy at the start of the pathway. It also aimed to improve communication with patients and referrers, consistency in decision making and deliver improved diagnostic turn-around times in a sustainable manner.

**Aims:** An evaluation was undertaken to assess whether the introduction of a daily DMDT has improved the pathway, the primary endpoint being a reduction in time to definitive diagnosis (TTDD). Secondary endpoints included measurements of efficiency and whether there has been a reduction in variation in practice.

**Methods:** Retrospective access to patient notes via Onkos and IMPAX over a 1-month period before (2015) and after (2018) the intervention.

**Results:** The introduction of the DMDT has led to an improvement in service efficiency and a reduction in both TTDD (9 days) and time to first management decision (8 days). The service also has an added benefit in reducing average total patient miles travelled over the course of diagnosis by 24.41 miles.

**Conclusion:** The introduction of a diagnostic MDT at the start of the pathway does lead to an improvement in service efficiency and a reduction in TTDD.

8.

##### CLINICAL, HISTOPATHOLOGICAL FEATURES AND SURGICAL OUTCOME FOR APPENDIX ADENOCARCINOMA

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**Background:** Aim of this series is to explore the clinical presentation, histological characteristics of appendix primary adenocarcinoma and surgical outcome.

**Method:** Retrospective data collection from patient's notes from January 2011 to Feb 2018 in a single trust.

**Results:** 13 (0.005 %) appendix primary adenocarcinoma from 2383 appendectomy performed during the period from 2011 to 2018 (Table 1). Completion treatment was right hemi-colectomy in 10, de-functioning ileostomy in 1 and no further intervention in 2. 7 out of 8 patients died of complications related to stage IV disease.

**Conclusion:** Natural history of appendix adenocarcinoma carries lot of morbidity and mortality even with best of follow-ups. With careful clinical & radiological assessment, still pre-operative diagnosis is very difficult. Peri-operative diagnosis of appendix cancer is still challenge and needs to be investigated further.

**Table 1**