Posters for BASO Trainees and BASO Poster Presentations (Part – 2)

at the 2020 BASO Annual (virtual) Scientific Meeting
21st – 23rd November 2020

Should you have any questions for the abstract presenter or would like to contact the abstract author for more information regarding their paper, please email admin@baso.org.uk. Kindly send your email in the following format:

- Add 'Abstract Query' as your email subject
- Start with Abstract Number and Title in the email.
- Add your question/s for the author.

(*Please note: your email will be forwarded to the abstract author who will be responding to you directly).*

Poster 50: Our Local Experience with Laparoscopic Colorectal Cancer Surgery in a Rural Community Setting

Barnable K**, Rogerson E**, Schimp-Manuel K*, Singh-Ranger G**

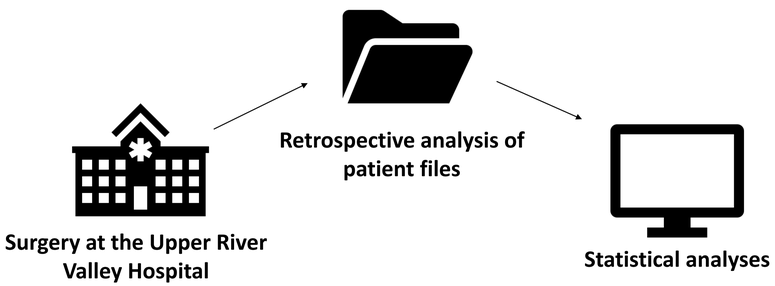
2020 BASO Annual (virtual) Meeting
21st – 23rd Nov

Introduction / Background

Rural hospitals struggle with recruitment and thereby establishing new techniques. The Upper River Valley hospital is a small rural hospital located west-centrally in New Brunswick, Canada and provides services to the town of Woodstock, Hartland and several other surrounding communities. In 2015, following the arrival of the senior author, we instituted a new program of laparoscopic colorectal resections. Laparoscopic methods have been associated with less blood loss, shorter postoperative stay and a decrease in both complications and mortality following surgery in colorectal cancer patients[1]. This retrospective study examines the patient data of 117 colorectal cancer patients who received care at the Upper River Valley Hospital from 2014-2020, after the initiation of this new laparoscopic surgery program.

Objectives

Our study aims to conduct a retrospective review of colorectal cancer care in the Upper River Valley Hospital from the past 6 years. We will look specifically at our own local experience between 2014-2020. This timeline coincides with the arrival of the senior author into the facility, who introduced laparoscopic colorectal surgery, and enhanced recovery. Through this review, we hope to gain a better understanding of our own experience with colorectal cancer cases in the community. This research will also allow us to look at our own practice in a qualitative way, and hopefully guide us on our best practices, and those which need improvement.



Methods and Materials

Approval from our Research Ethics Board (REB) was received.
Following REB approval, we performed a retrospective review of all colorectal cancer cases in the Upper River Valley Hospital from 2014 to 2020. We retrieved information from physical patient files and files located in the Meditech online file system on site at the Upper River Valley Hospital. We performed statistical analyses using R software to look for survival statistics and significant relationships between clinical, demographic and pathological factors. In particular, we looked at differences between patients who received laparoscopic surgery compared to patients who had open surgeries.
Analyses include Kaplan-Meier survival curves with a LogRank test, unpaired t-test and Kruskal Wallis One way ANOVA.

Results

In total, we analyzed data from 117 colorectal cancer cases. Of these cases, 13 patients had Stage 4 cancer and all patients had surgical intervention. The mean age was 69.9 [10.3] and the male to female ratio was 1.3: 1.

Statistical analyses show no significant difference in distal or circumferential margins between patients who received laparoscopic surgery and those who received open surgery (p=0.137, p=0.15). Poor survival was significantly associated with tumour size over 4.6 cm (p=0.00035) (see Figure 1) and tumour site (right vs. left/rectal) (p=0.05). We found no significant association between outcome and age, sex or lymph node ratio (cut off value: 0.1, p=0.24). Further comparison can be seen in Table 1.

Table 1. Comparison of laparoscopic and open surgeries in 117 colorectal cancer patients. * unpaired t-test, **rechecked with Kruskal Wallis One way ANOVA.

Procedure	Right	Left/Rectal	Mean Age (years)	Duration of Surgery (minutes)	Length of Stay (days)	Mean Lymph Node Yield
Laparoscopic	23	17	69.9	199. 66 [131-307]	6.24	15.3
Open	31	46	69.4	166.11 [66-378]	9.95	17.1
P Value*			0.76	0.02	0.0035, 0.0001**	0.155

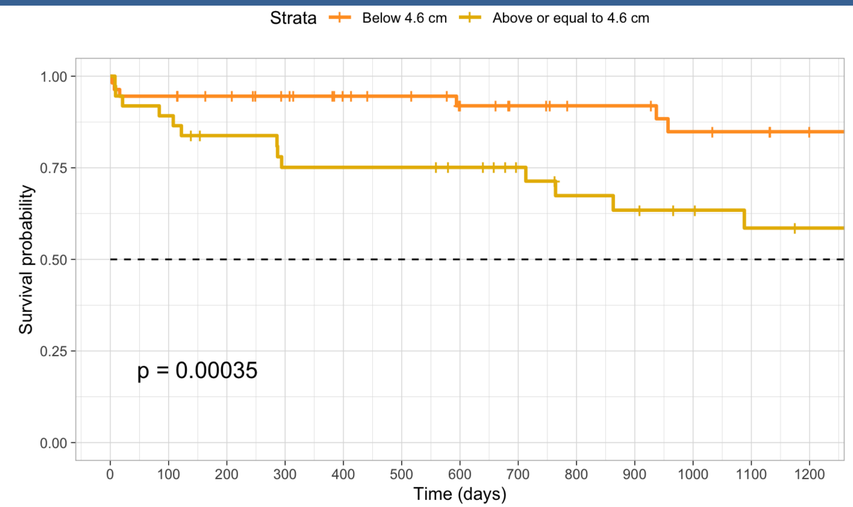


Figure 1. Kaplan-Meier survival curve showing overall survival probability in tumours below and above the mean size of 4.6 cm. The p value shown is from the LogRank test.

Discussion

Our data is consistent with previous findings that support the use of laparoscopic surgical methods in the treatment of colorectal cancer[1]. Findings show a significant decrease in length of stay associated with laparoscopic surgery (p=0.0035), which supports previous findings[1]. Previous studies have also recorded that surgery duration is longer in laparoscopic surgeries, which was a finding in our study as well[1]. In this study, tumour size and tumour site were also significantly associated with worse overall survival outcomes (p=0.00035 and p=0.05, respectively). These survival trends support previous findings that associate poor survival with larger tumours and tumours of the right side[2,3].

Conclusions

Laparoscopic colorectal surgery is a viable option in small rural facilities, and should be supported and developed. The operations may take longer, but there exist tangible benefits - reduced length of stay and equivalent high quality surgical outcomes.

Contact

Professor Gurpreet Singh Ranger,
Chief of Surgery,

Krystal Schimp-Manuel,
Research Administrator

Emma Rogerson,
Health Research Intern

Keeley Anne Barnable
Health Research

References

1. Song, X. J., Liu, Z. L., Zeng, R., Ye, W., & Liu, C. W. (2019). A meta-analysis of laparoscopic surgery versus conventional open surgery in the treatment of colorectal

Poster 54: A Service Evaluation of the Two Week Wait Pathway for Suspected Head and Neck Cancer at The Royal London Hospital

Miss Aliya Hasan, Miss Aoibheann Wall, Mr Leo Cheng

Oral and Maxillofacial Department, The Royal London Hospital

2020 BASO Annual (virtual) Meeting
21st – 23rd Nov

Introduction / Background

First developed by the Department of Health in 1997, the two week wait referral pathway was created as an effective 'fast track' service for patients within the NHS with suspected cancerous lesions[1].

The aim of the service was to make sure every patient with a suspected malignancy was seen by a consultant in a secondary care setting within two weeks of the referral being made. The Department of Health went on to further expand this service in the year 2000, when guidance for suspected head and neck cancers was developed.

Initially produced in order to reduce long wait times for patients, this service has seen a large increase in the number of urgent referrals received by NHS Trusts.

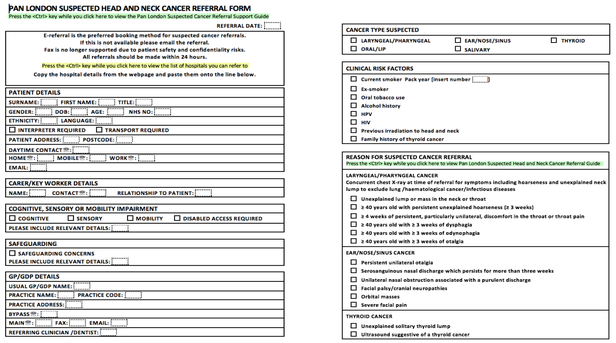
Objectives

The primary aim of this service evaluation is to understand how many patients referred to the Oral and Maxillofacial Surgery Department (OMFS) on the two week wait pathway within six months have been diagnosed with a malignancy.

The project will also highlight the difference in the number of referrals received by General Dental Practitioners (GDPs) compared to General Medical Practitioners (GMPs) and which profession detected the most malignancies. Further data collection also illustrates the most commonly referred site of suspected malignancy in the head and neck region.

Methods and Materials

Retrospective data collection of two week wait referrals over a ten-month period was carried out. The referrals were all received by the OMFS Department at The Royal London Hospital. The majority of referrals were completed by a health professional on a Pan London Suspected Cancer Form[2] as shown in Figure 1.



PAN LONDON SUSPECTED HEAD AND NECK CANCER REFERRAL FORM

Press the <Ctrl> key while you click here to view the Pan London Suspected Cancer Referral Support Guide

REFERRAL DATE:

E-referral is the preferred booking method for suspected cancer referrals.
If this is not available please email the referral.
Fax is no longer supported due to patient safety and confidentiality risks.
All referrals should be made within 24 hours.
Press the <Ctrl> key while you click here to view the list of hospitals you can refer to
Copy the hospital details from the webpage and paste them onto the line below.

PATIENT DETAILS
SURNAME: FIRST NAME: TITLE:
GENDER: DOB: AGE: NHS NO:
ETHNICITY: LANGUAGE:
☐ INTERPRETER REQUIRED ☐ TRANSPORT REQUIRED
PATIENT ADDRESS: POSTCODE:
DAYTIME CONTACT ☎:
HOME ☎: MOBILE ☎: WORK ☎:
EMAIL:

CARER/KEY WORKER DETAILS
NAME: CONTACT ☎: RELATIONSHIP TO PATIENT:

COGNITIVE, SENSORY OR MOBILITY IMPAIRMENT
☐ COGNITIVE ☐ SENSORY ☐ MOBILITY ☐ DISABLED ACCESS REQUIRED
PLEASE INCLUDE RELEVANT DETAILS:

SAFEGUARDING
☐ SAFEGUARDING CONCERNS
PLEASE INCLUDE RELEVANT DETAILS:

GP/GDP DETAILS
USUAL GP/GDP NAME:
PRACTICE NAME: PRACTICE CODE:
PRACTICE ADDRESS:
BYPASS ☎:
MAIN ☎: FAX: EMAIL:
REFERRING CLINICIAN /DENTIST:

CANCER TYPE SUSPECTED
☐ LARYNGEAL/PHARYNGEAL ☐ EAR/NOSE/SINUS ☐ THYROID
☐ ORAL/LIP ☐ SALIVARY

CLINICAL RISK FACTORS
☐ Current smoker Pack year [insert number]
☐ Ex-smoker
☐ Oral tobacco use
☐ Alcohol history
☐ HPV
☐ HIV
☐ Previous irradiation to head and neck
☐ Family history of thyroid cancer

REASON FOR SUSPECTED CANCER REFERRAL
Press the <Ctrl> key while you click here to view Pan London Suspected Head and Neck Cancer Referral Guide

LARYNGEAL/PHARYNGEAL CANCER
Concurrent chest X-ray at time of referral for symptoms including hoarseness and unexplained neck lump to exclude lung /haematological cancer/infectious diseases
☐ Unexplained lump or mass in the neck or throat
☐ ≥ 40 years old with persistent unexplained hoarseness (≥ 3 weeks)
☐ ≥ 4 weeks of persistent, particularly unilateral, discomfort in the throat or throat pain
☐ ≥ 40 years old with ≥ 3 weeks of dysphagia
☐ ≥ 40 years old with ≥ 3 weeks of odynophagia
☐ ≥ 40 years old with ≥ 3 weeks of otalgia

EAR/NOSE/SINUS CANCER
☐ Persistent unilateral otalgia
☐ Serosanguinous nasal discharge which persists for more than three weeks
☐ Unilateral nasal obstruction associated with a purulent discharge
☐ Facial palsy/cranial neuropathies
☐ Orbital masses
☐ Severe facial pain

THYROID CANCER
☐ Unexplained solitary thyroid lump
☐ Ultrasound suggestive of a thyroid cancer

Figure 1. Pan London Suspected Cancer Form

Results

In total, 249 patient referrals were recorded over a ten-month period.
Details of the referrer and the reason for the referral were recorded. The number of diagnosed malignancies following investigation was also recorded.

Out of the 249 patient referrals that were screened, 7% were diagnosed with malignant lesions of the head and neck as shown in Figure 2. In terms of the referral pathway, over a ten-month period it was found that there were more referrals from GMPS than GDPs as shown in Figure 3. GMPs accounted for more than half the number of referrals obtained, whereas only 30% of referrals were received by GDPs.

It was found that the most commonly referred site for suspected head and neck cancer was the right and left buccal mucosa. The least referred lesion over the ten-month period was the maxillary sinus with only one referral being received for potential malignancy as shown in Figure 4.

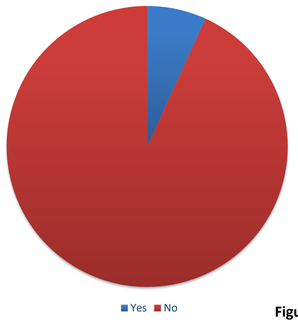


Figure 2. Proportion of 2WW patients diagnosed with a head and neck malignancy

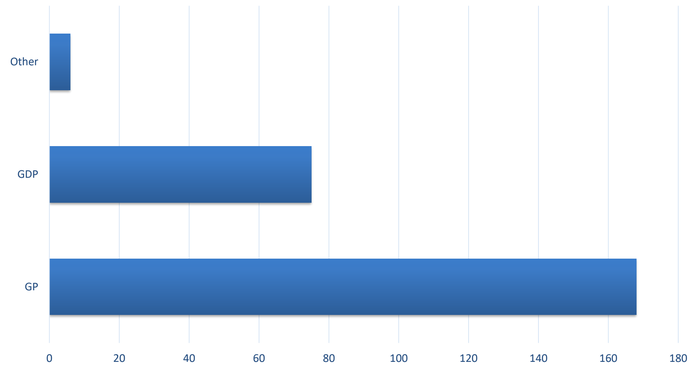


Figure 3. Origin of 2WW referrals

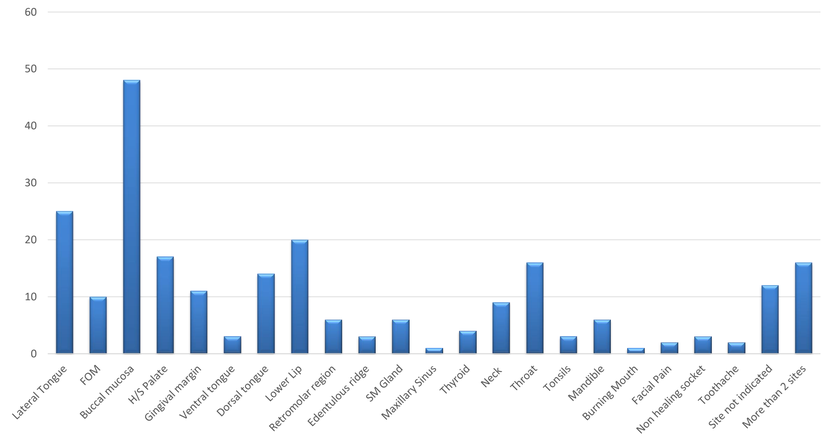


Figure 4. Anatomical Site of 2 week wait head and neck referrals

Discussion

This service evaluation has highlighted the importance of the need for comprehensive education of head and neck cancer for both medical and dental professionals. There is an ongoing need to provide continuing professional development for primary and secondary care practitioners, in order to improve the knowledge of the development of head and neck cancers; notably when a lesion needs to be referred and when one can be managed in primary care under the use of a safety netting method.

The use of NHS resources for patients on a two week wait pathway can be costly and therefore, by educating health professionals further, this may aid in decreasing the number of inappropriate referrals and therefore reduce some NHS expenditure.

Whilst this is a topic for further discussion, it is important to highlight that all referrals are made in the best interests of patients. Therefore, it is importance to accept a balance between education and patient best interests.

Conclusions

This service evaluation has highlighted the need for further education of head and neck malignancies. To streamline the service, a greater understanding of when a lesion needs to be referred and when one can be managed in primary care is required. This is also true to reduce the pressure on hospitals to achieve the two week wait target.

Contact

Miss Aliya Hasan BDS, MJDF RCS (Eng), FHEA
Former Clinical Fellow in Oral and Maxillofacial Surgery
The Royal London Hospital
Email: aliya.hasan@nhs.net

References

1. The New NHS Modern Dependable 1997. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/266003/newnhs.pdf (accessed 12 Nov 2020).
2. Pan-London suspected cancer referral forms - Healthy London Partnership Partnership. https://www.healthylondon.org/suspected-cancer-referrals/ (accessed 12 Nov 2020).

Poster 55: An Assessment of Resolved Head and Neck Lesions on the Two Week Wait Pathway at The Royal London Hospital

Miss Aliya Hasan, Miss Aoibheann Wall, Mr Leo Cheng

Oral and Maxillofacial Department, The Royal London Hospital

2020 BASO Annual (virtual) Meeting

21st – 23rd Nov

Introduction / Background

The aim of this project was to understand how many patients referred to the Oral and Maxillofacial Surgery (OMFS) Department at The Royal London Hospital on the urgent 2 week wait head and neck cancer pathway, could have been managed in primary dental/medical care services.

A vast number of patients are referred by General Dental Practitioners (GDPs) and General Medical Practitioners (GMPs) to secondary care settings for suspected cancerous lesions of the head and neck. However for some patients, by the time a patient is seen for a face to face consultation, the lesion for which the referral was made, has in fact resolved.

The majority of referrals reviewed for this project, were sent through the Pan London Head and Neck Referral System. A guide for referral can be seen in Figure 1[1].

Objectives

1. To understand how many patients referred over a ten-month period on the 2 week wait head and neck pathway had resolved lesions at the time of their first consultation in the Oral and Maxillofacial Surgery Department at The Royal London Hospital
2. To assess ways in which further education can be given to GDPs and GMPs to prevent inappropriate referrals

Pan-London Suspected Cancer Referral Guide - Head & Neck

23% of all head and neck cancers affect the pharynx and 16% for the larynx (NCIN, 2009). The Pan-London Clinical Reference Group (CRG) recommend including symptoms affecting the pharynx (base of tongue, oropharynx, nasopharynx, pyriform sinus, hypopharynx, tonsil and a proportion of floor of mouth and palate). Pharyngeal cancer affects younger people (40-60 years) so the CRG recommend lowering the age threshold to 40 years of age for suspected pharyngeal cancers.

RISK FACTORS for head and neck cancer include:
- Smoking
- Oral tobacco use
- Alcohol consumption
- HPV
- HIV
- Previous irradiation to head and neck
- Family history of thyroid cancer

STRIDOR IS AN EMERGENCY AND REQUIRES SAME DAY REFERRAL

Very urgent concurrent CHEST X-RAY to be performed for patients presenting with HOARSENESS and UNEXPLAINED NECK LUMP to exclude lung/haematological cancer/infectious diseases

The x-ray request form should state that this is a very urgent request (to be performed within 48 hours). The possibility of cancer diagnosis should be discussed with the patient and safety-netting/follow up arrangements should be made.

LARYNGEAL/PHARYNGEAL CANCER
- Unexplained lump or mass in the neck / throat
- ≥ 40 years old with persistent unexplained hoarseness (≥ 3 weeks)
- ≥ 4 weeks of persistent, particularly unilateral, discomfort in the throat or throat pain
- ≥ 40 years old with
  - ≥ 3 weeks of dysphagia
  - ≥ 3 weeks of odynophagia
  - ≥ 3 weeks of otalgia

SALIVARY CANCER
- ≥ 40 years old with unexplained or persistent parotid or submandibular swelling
- Firm sub-mucosal swelling in the oral cavity

Referral is due to CLINICAL CONCERNS that do not meet NICE/pan-London referral criteria (the GP MUST give full clinical details in the 'additional clinical information' box at the time of referral)

EAR/NOSE/SINUS CANCER
- Persistent unilateral otalgia
- Serosanguinous nasal discharge which persists for more than three weeks
- Unilateral nasal obstruction associated with a purulent discharge
- Facial palsy / cranial neuropathies
- Orbital masses
- Severe facial pain

THYROID CANCER
- Unexplained solitary thyroid lump
- Ultrasound suggestive of thyroid cancer

ORAL/LIP CANCER
- ≥ 3 weeks unexplained ulceration in the oral cavity
- Suspicious lump/mass on the lip or in the oral cavity
- A red or red and white patch in the oral cavity suggestive of leukoplakia or erythroleukoplakia
- Tooth mobility not associated with periodontal disease
- Poor healing ≥ 3 weeks post tooth extraction

SUSPECTED HEAD & NECK CANCER REFERRAL

Methods and Materials

In total, 249 patient referrals were recorded over a ten-month period. Details of the referrer and the reason for the referral were recorded.

The number of diagnosed malignancies following investigation was also recorded. Patient referrals and clinical notes were used to collect data. The data was then inputted into an Excel spreadsheet.

The data capture sheet used can be seen in Table 1.

Results

Out of 249 patients, 12 had resolved lesions at the time of their new patient consultation, equating to 4.8% of all head and neck cancer referrals over a 10 month period as shown in Chart 1.

The most common site of resolved lesions were on the tongue (5 out of 12 patients). There was also some variation in the ethnicity of patients with resolved lesions e.g. White-British, Spanish, Indian and Bangladeshi.

Other resolved cases included lesions such as ulcers, white/red patches of the buccal mucosa, lip and palate. The length of time that each lesion had been present for varied from 2 weeks to 3 years.

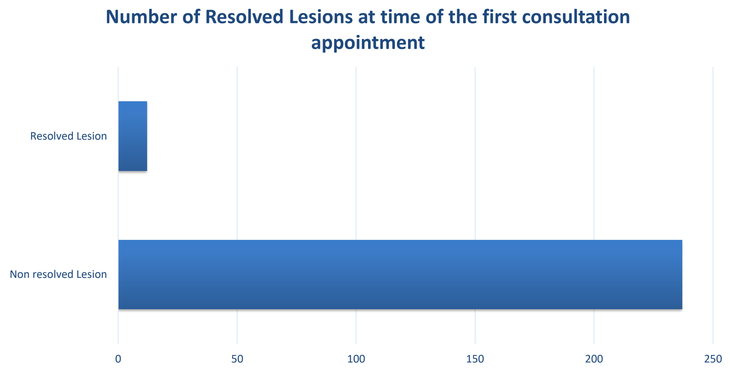


Chart 1. Number of resolved lesions at time of the first consultation appointment.

Patient ID	Who was the patient referred by?	Reason for Referral	Investigations carried out	Malignant lesion confirmed?

Table 1. Data Capture Sheet

Discussion

Understanding the signs and symptoms of benign oral lesions compared to potential malignant lesions is extremely important. Being able to recognise risk factors for oral malignancies is also very important in order to understand which patients require referral on the two week wait head and neck referral pathway compared to those who can be managed in a primary care setting.

By being able to distinguish between these lesions, it can prevent many unnecessary referrals to secondary care settings, thereby allowing more time for potential malignant cases to be seen and managed appropriately.

However, we do appreciate that if clinicians are uncertain in their diagnosis, seeking a second opinion in the best interests of a patient may be required.

Conclusions

It is important to understand the need for further education in recognising benign and malignant head and neck conditions. Clinicians should take into account the time a lesion has been present for, its clinical signs and symptoms and any further risk factors.

With this, the number of referrals to a secondary care setting on the 2 week head and neck cancer pathway may decrease, reducing pressures on the NHS to provide appointments within 2 weeks that are not required.

Contact

Miss Aliya Hasan BDS, MJDF RCS (Eng), FHEA
Former Clinical Fellow in Oral and Maxillofacial Surgery
The Royal London Hospital
Email: aliya.hasan@nhs.net

References

1. Pan-London suspected cancer referral forms - Healthy London Partnership Partnership. https://www.healthylondon.org/suspected-cancer-referrals/ (accessed 12 Nov 2020).

Poster 56: Breast Surgery at University Hospitals Leicester during the Pandemic.

Javeria Iqbal ,Anoushka Kneale , Kalliope Valassiadou
University Hospitals Leicester.

2020 BASO Annual (virtual) Meeting
21st – 23rd Nov

Introduction:

COVID-19 was declared as a pandemic by the World Health Organization (WHO) on March 11, 2020.
Healthcare resources worldwide were rearranged to manage the influx of a large number of patients requiring intensive monitoring and mechanical ventilation, affecting cancer treatments including breast cancer.
Liang et al reported that patients with cancer are more likely to be infected by the virus because of their immune-depressed state induced by their cancer, and treatment of cancer. However delaying cancer treatment can be detrimental too.

ABS Statement May 2020

While performing breast surgeries the following points should be considered:
.It is essential that all surgeons operate with the appropriate PPE.
- The availability of theatre space, taking into account collaboration with other specialties to prioritise patients who require surgery
- The environment in which breast surgery can be currently delivered i.e. non Covid-19 treating site vs site treating acute Covid-19 patients
- Urgency of the procedure and risk to patients of attending hospital
- Co-morbidities which may impact on outcomes if Covid-19 is contracted
- Complications associated with a procedure and subsequent risks these may pose to patients and staff

Guidelines for pre-operative COVID-19 testing for elective cancer surgery

It outlines the process to ensure a consistent approach to screening for COVID in the cancer patient undergoing surgery. This aims to ensure both staff and patient safety by minimising the risk of COVID in the perioperative pathway.
All patients having elective cancer surgery:
•Must have been asymptomatic and self isolated for at least 14 days prior to surgery
•Must have a COVID throat swab within 72 hours of surgery - this can be done at home to prevent the need to visit hospital before admission
•Where practical self isolate for 14 days following discharge after surgery

Methods:

Prospective audit of all women(n=95) admitted for breast surgery in University Hospitals Leicester between 18 May-26 June 2020.

Results:

Two patients had emergency procedures while 93 had elective surgery.
Among patients undergoing elective surgery 86 had cancer and 7 underwent elective surgery (fibroadenoma x5, exchange of expander, removal of ruptured implant). The age range was 18-76 years (median=60).
Patients were swabbed preoperatively (73) but some were not (22) due to transition to implementation of swabbing from previously not required.
No patients tested positive for COVID-19 in their preoperative swabs. All patients were advised to isolate before and after surgery for 14 days.
Full PPE was used by surgeons and anaesthetists during surgery.
All patients were followed 3-4 weeks postoperatively, no patient had a positive COVID- 19 swab nor had respiratory symptoms.

Conclusion:

We conclude from our cohort of patients that if necessary precautionary steps are taken breast cancer patients can undergo surgery safely during the pandemic.
- ABS and RCS guidelines were fully followed.
- We aim to see if any patient was affected during the adjuvant treatment.

Contact

Miss Javeria Iqbal
University Hospitals Leicester.
javeriaiqbal5@hotmail.com
07944635654

References

1.Celayir MF, Aygun N, Tanal M, Koksal HM, Besler E, Uludag M. How should be the Surgical Treatment Approach during the COVID-19 Pandemic in Patients with Gastrointestinal Cancer? Sisli Etfal Hastan Tip Bul. 2020;54(2):136-141.
2.Hollander J.E., Carr B.G. Virtually perfect? Telemedicine for Covid- 19. N Engl J Med. 2020 Apr;382(18):1679–1681.
3. Liang W., Guan W., Chen R. Cancer patients in SARS-CoV- 2 infection: a nationwide analysis in China. Lancet Oncol. 2020 Mar;21(3):335–337.

Poster 57: Revision surgery after preventative breast surgery in gene carriers and high-risk women – Risk factors and how to reduce reoperation rates.

Javeria Iqbal, Walid Sasi, Pranav Mishra, Kalliope Valassiadou.
The Breast Unit University Hospitals Leicester

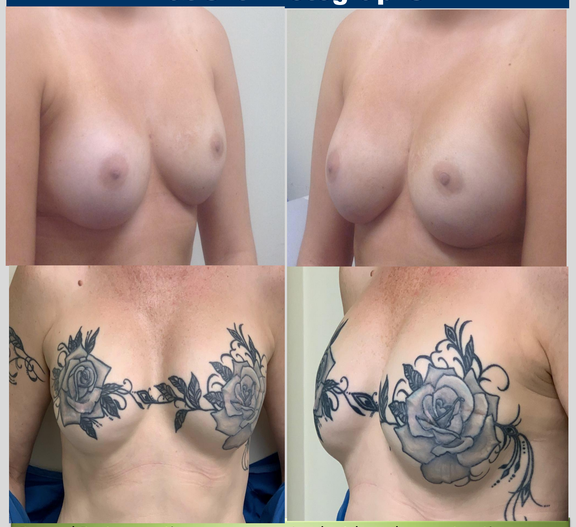
Background

Preventative breast surgery reduces breast cancer incidence in gene carriers and high-risk individuals. Various techniques and prosthetic materials are currently used for immediate breast reconstruction. We describe the experience of a single surgeon in University Hospitals Leicester from 2003 to 2019.

Methods

- This poster describes the outcomes of patients undergoing risk reducing mastectomy at University Hospitals Leicester under a single surgeon between 2003 and 2019.
- All patients underwent pre-operative evaluation – risk determination +/- gene testing, surgical discussion, psychological evaluation in selected cases.
- All 168 risk reducing mastectomies were reviewed to record method of reconstruction, lengths of follow-up, previous breast cancer, smoking history, BMI, radiotherapy, complication rates and revision surgery.

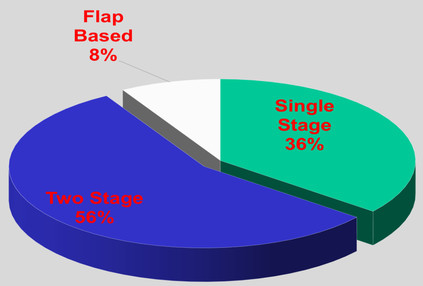
Patient Photographs



Pre and Post–operative appearance. Implant-based reconstruction following skin sparing mastectomy in a gene carrier.

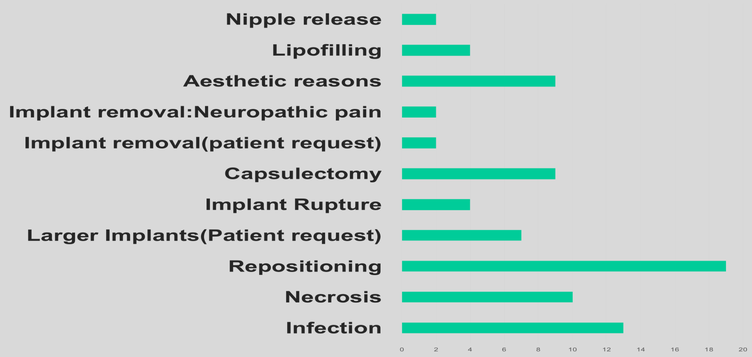
Results

- 88 women underwent 163 risk reducing mastectomies
  - 133 BRCA gene carriers .
  - 32 high risk families (no specific gene identified)
  - 3 previous mantle Irradiation.
  - 1 p53 Carrier.
- Median age 41 yrs. (range 27-72)
- Average BMI 24.7 (range 18-48)
- Smokers or ex-smokers 27/88
- Previous Radiotherapy 18/88



Single stage reconstruction 60/163
Two stage reconstruction 94/163
Flap based reconstructions 14/163
Bio-mesh was used in 49/163.

- **Unplanned revisions** 81/163 (56 once, 15 twice, 7 three times, 3 four times)
- Reasons for Revisional surgery included wound breakdowns (infection/necrosis), implant repositioning, implant removal for pain, removal of redundant skin, and lipo-modelling.



23/163 – infection/necrosis. (15 Implants were lost to infection)
Infection was more common in smokers ($p<0.00001$)

28 patients had BMI >25 and there was no increased risk of infection/necrosis or revisional surgery among this cohort.($p=0.6$)
18 patients had previous radiotherapy and only 3 had infection.

Conclusion

Smoking is the most important risk factor that increases incidence of infection, necrosis and revisional surgery after preventative breast surgery.

NHS University Hospitals of Leicester NHS Trust

Poster 64: Re-audit of Surveillance Cystoscopies in Bladder Cancer

Muhammad Shams [1], Mohamed Elsllabi [1,2], Abdullah Bin Sahl [1]
[1]Calderdale and Huddersfield NHS Foundation Trust, [2]University of Benghazi

BASO~ACS

2020 BASO Annual (virtual) Meeting
21st – 23rd Nov

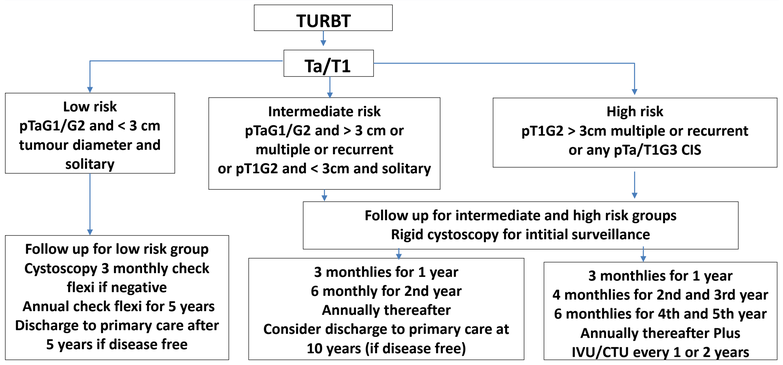
Aim

- To ensure guidelines are followed for cystoscopic surveillance
  - Current Flexi At appropriate Time
  - Next Flexi at Appropriate Time

Methods and Materials

- Retrospective re-audit, closing the loop
- Current audit February 2020
- Calderdale and Huddersfield NHS Foundation Trust (CRH and HRI)
- Previous audit April 2015

YCN Guidelines



Results and Discussion

Table 1. Findings - Histology

Risk group	HRI	CRH
Low	7	2
Intermediate	13	9
High	6	20
Total	26	31

Table 2. Findings – Were guidelines followed?

	HRI		CRH	
	Re-audit 2020	Previous audit 2015	Re-audit 2020	Previous audit 2015
Current cystoscopy	18/26 (69.2%)	40 (83%)	19/31 (61.1%)	25 (71%)
Next Cystoscopy	17/24 (70.8%)	40 (83%)	27/30 (90%)	24 (68%)

Recommendations

- Summary box documenting.
  - Date of diagnosis, histology, size and recurrence
  - Ideally mention risk category

- Laminated guidelines for endoscopy room- in HRI / CRH
- Email reminder of guidelines
- Re-audit December 2020

Conclusions

- Improvement seen in CRH next cystoscopy
- Poor documentation of initial histology
- Recurrence status not very apparent
- No documentation of size
- Similar errors were identified on the initial audit

Contact

Mohamed Elsllabi
Calderdale and Huddersfield NHS Foundation Trust

Email: Mohamed.elsllabi@nhs.net

Poster 71: The impact of the coronavirus pandemic for men with suspected prostate cancer in a district hospital

Hannah Thorman[1]; Azad Hawizy[1]
[1]East Suffolk and North Essex NHS Foundation Trust

2020 BASO Annual (virtual) Meeting
21st – 23rd Nov

Introduction

Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) is the causative virus of coronavirus disease (COVID-19) [1]. This virus has spread at an alarming rate, resulting in the COVID-19 pandemic. This has had an unprecedented effect on healthcare systems globally, with devastating effects to patients.

Aim

The coronavirus pandemic has dramatically affected the service we are able to provide to our patients. Our aim was to review the impact this had for men with suspected prostate cancer at our local hospital.

Methods

We conducted a retrospective study, reviewing data between 23rd March 2020 and 1st June 2020. During this period our hospital implemented their emergency strategy for coronavirus, limiting our resource and provision of services. We documented the number of referrals for men with suspected prostate cancer, the number of prostatic biopsies performed, histopathology results and subsequent management plan for these patients.

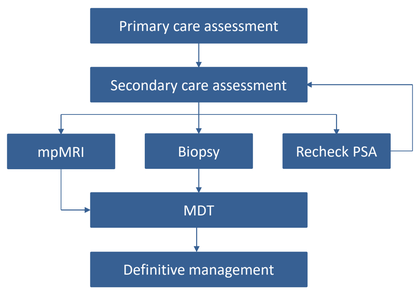


Figure 1. Diagnostic pathway for men with suspected prostate cancer

Results

During this period we received 46 two-week wait referrals for suspected prostate cancer. We performed prostatic biopsies in 41 men. 97.6% of men underwent a pre-biopsy multiparametric MRI of the prostate (mpMRI) to aid with targeting of the suspected lesion. All biopsies were performed under local anaesthetic. 68.3% were performed using the transperineal (TP) technique, and 31.7% were transrectal ultrasound (TRUS) guided biopsies.
Following biopsy all men were discussed virtually at the multidisciplinary team (MDT) meeting.
68.3% of men had positive prostate histopathology. 28.6% of men opted for active surveillance, 52.2% chose radiotherapy, 7.1% were commenced on hormonal treatment, and 7.1% were added to the waiting list for surgery.

Discussion

COVID-19 has vastly impacted multiple steps within the diagnostic pathway for men with suspected prostate cancer (Figure 1). Reductions of two-week wait referrals of up to 84% were reported in March-May 2020 [2]. This may be due to a combination of fewer primary care appointments available and patient anxiety of seeking medical advice due to the potential risk of contracting COVID-19. In addition to this, there was reduced access to phlebotomy services which impacted on prostate specific antigen (PSA) testing.

Once referred to secondary care, we had difficulty obtaining mpMRI of the prostate, therefore causing further delays. The Prostate Imaging Reporting and Data System (PIRADS) score classifies lesions on MRI, reflecting their level of suspicion for prostate cancer. Figure 2 reiterates the importance of mpMRI, showing a positive correlation with increasing PIRADS score and proportion of men with intermediate and high-risk prostate cancer. This is therefore an important step in the diagnostic pathway as it allows identification of probable high-risk prostate cancer and enables targeting of the lesion when performing prostatic biopsy.

Fortunately, our local hospital was able to continue to provide a service to perform prostatic biopsy under local anaesthetic. We did not have any access to operating lists in theatre and therefore this was only possible due to a dedicated urology suite where we could perform this procedure. We had a dedicated team of urology specialist nurses available who were able to assist with this.
There was a delay in treatment for those patients requiring surgical management of their prostate cancer. All other patients were managed with surveillance, radiotherapy or hormonal treatment, which was all delivered in a timely fashion.

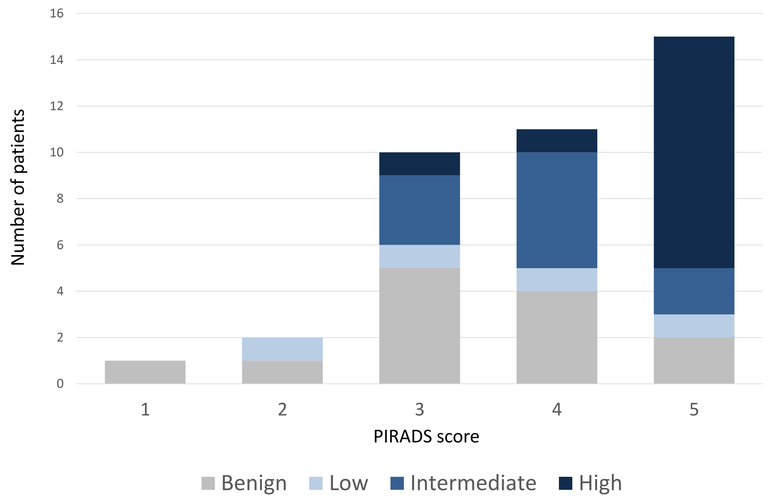


Figure 2. Correlation between mpMRI PIRADS score and prostate histopathology risk category

Conclusions

Despite the coronavirus pandemic we were still able to successfully deliver a prostate cancer diagnostic pathway. This was only possible due to a dedicated urology suite where we were able to continue to perform prostatic biopsies under local anaesthetic. Transformation of the MDT meeting into a virtual format enabled continuation of this service.

Contact

Hannah Thorman
East Suffolk and North Essex NHS Foundation Trust
Email: h.thorman@yahoo.co.uk
Phone: 07585119343

References

1. World Health Organization, 2020. *Naming The Coronavirus Disease (COVID-19) And The Virus That Causes It*. [online] Who.int. Available at: <https://www.who.int/emergencies/diseases/novel-coronavirus-2019/technical-guidance/naming-the-coronavirus-disease-(covid-2019)-and-the-virus-that-causes-it> [Accessed 10 November 2020].
2. Sud, A., Torr, B., Jones, M., et al. 2020. Effect of delays in the 2-week-wait cancer referral pathway during the COVID-19 pandemic on cancer survival in the UK: a modelling study. *The Lancet Oncology*, 21(8), pp.1035-1044.

Poster 75: Isolated Breast Pain in One Stop Breast Clinic

Dr Patricia Lolua Lali; Mr. Vishal Patel; Mr. Ekambaram Babu;
The Breast Unit, The Hillingdon Hospitals NHS Trust

2020 BASO Annual (virtual) Meeting
21st – 23rd Nov

Background

Isolated mastalgia is frequently seen under the 2WW criteria but has long has a controversial role in the identification of breast malignancy[1].

The waiting times target for patients referred with breast symptoms is 93% within two-weeks. Prior to the Covid-19 pandemic, the numbers being seen nationally within this timescale had already fallen to 83.6%[2]. Given the current extension in waiting lists across the U.K., we have a responsibility to scrutinise our clinical priorities for referral. One-stop clinics provide comprehensive diagnostic testing in one outpatient appointment. Nevertheless, the referral is not universally appropriate and can be anxiety inducing for many given the invasive nature of the investigations. Furthermore, there are many ultrasound investigations requested by clinicians at additional economic cost with little diagnostic benefit.

Objectives

The aims of this study were as follows:

- To identify the proportion of patients aged 40 years or older presenting to One Stop Breast Clinic with breast pain as their only presenting symptom i.e. no discreet lump and/or nipple symptoms
- The rate of new malignancy diagnosed in this cohort.

Secondary Aim:

- The standard investigations ordered for these patients given the absence of any breast lump.

Methods and Materials

Inclusion Criteria:
The data from all patients aged 40 or older who attended Hillingdon Hospital One Stop Breast Clinic between September and December 2019 was included in this study. Both male and female patients were included. In total, 623 patients met this criteria.

Patients were classed as presenting with ”single symptom” were those with:

- Unilateral or bilateral breast pain;
- Nipple pain (without skin changes or discharge);
- No discreet lump or nodularity on clinical examination

Method:
Retrospective data was obtained from Breast Outpatient Clinic lists/letters and cross referenced with information provided on imaging request forms. Data from subsequent imaging, if performed, was also reviewed.

Presentations to One Stop Breast Clinic

Symptom	Patient Numbers
Lump	238 (38%)
Pain	196 (31%)
Lump + Pain	72 (12%)
Nipple symptoms *(discharge, bleeding, skin changes)*	31 (5%)
Other *(Implant complications, Abscess, Asymmetry, Asymptomatic)*	31 (5%)
Screening detected changes	20 (3%)
Incidental finding	18 (3%)
Skin changes	12 (2%)
Gynaecomastia	4 (<1%)
Lump + Skin changes	1 (<1%)

Results

Of the 623 patients aged 40 and over who attended One Stop Breast Clinic at Hillingdon between September and December 2019, 196 patients sole presenting symptom was mastalgia. As demonstrated in Figure 1, this is almost a third of the patients.

A small proportion of these patients were reassured based on clinical history and examination findings alone, however the majority went on to receive further imaging. This was either a mammogram, an ultrasound or both.

Most notably, only 8 patients who presented with breast pain alone went on to have either a FNA or biopsy performed. No patients had concerning biopsy findings.

Zero patients were diagnosed with malignancy as a result of attendance at One Stop Breast clinic.

Figure 1: Clinical symptoms on presentation

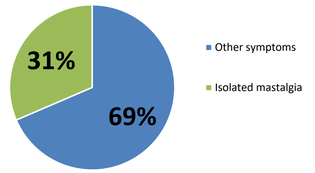


Figure 2: Imaging modalities of breast pain

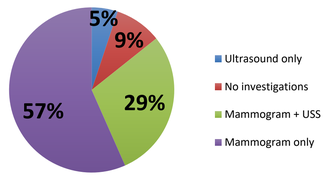
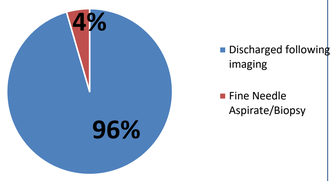


Figure 3: Further investigations of breast pain



Discussion

This study has demonstrated that although isolated mastalgia represented >30% of clinical time, there was no relationship between this symptom and malignancy in this cohort. These patients are frequently subjected to USS and mammograms, as well as experiencing significant anxiety associated with referral under the 2WW pathway. In addition, there is an increase to clinician workload: be that the GP who refers these patients or the multiple specialists they see in clinic, including the sonographers. The combined clinical time correlates with a low yield of identifying a breast malignancy – which is the very purpose of a 2WW clinic.

Furthermore, as mentioned previously, Breast units across the country are struggling to meet UK government targets within 2 weeks. This was prior to the challenges imposed on the NHS by the Covid-19 pandemic.

If it was safe to do so, by downgrading isolated breast pain as a symptom warranting a priority referral, it may be possible to see a higher percentage of those presenting to their GPs with more worrying clinical signs or symptoms. This may increase the yield of patients being diagnosed with a primary breast malignancy through this clinic.

Finally, the cost of one patient to attend a One Stop Breast Clinic is estimated at £151.90[3]. In this 3 month period alone, this equates to a saving of £29,772.40 if patients with breast pain were not seen.

Conclusions

The evidence demonstrated by this audit suggests that, despite representing almost a third of Hillingdon’s one stop clinic appointments in the >40 age group, isolated mastalgia has a low or indeed absent association with underlying breast malignancy. Especially in the current NHS climate, which is minimising face to face patient contact due to Covid-19, the findings of this audit suggests that national guidance about the criteria for these appointments should be regularly reviewed. More evidence would be required to support a change in policy, including obtaining data on the <40s age group. This change in policy could mean patients presenting with isolated mastalgia to their GP would not qualify for a 2WW cancer referral. There may also be an argument to support GPs having direct access to mammograms in this patient group.

Contact:
Dr Patricia Lolua Lali, E-mail: patricia.lali@nhs.net
Website: https://www.thh.nhs.uk/services/breast_unit/index.php

References:
1. Robin L. Smith, S. P. (2004, March). Evaluation and Management of Breast Pain. Mayo Clinic Proceedings. 2. Breast Cancer Now [Online] // Breast Cancer Now. The Research & Care charity . - April 2020. - https://breastcancernow.org/about-us/media/press-releases/we-respond-nhs-england-breast-cancer-waiting-times 3. Dey, Paola et al. “Costs and benefits of a one stop clinic compared with a dedicated breast clinic: randomised controlled trial.” BMJ (Clinical research ed.) vol. 324,7336 (2002): 507.

Poster 76: Recurrence of Breast Cancer following Breast Conserving Surgery

Geetin Majhail, MBBS[1,2]
[1]London North West University Hospital Trust, [2]Ealing Hospital

BASO~ACS

2020 BASO Annual (virtual) Meeting
21st – 23rd Nov

Introduction / Background

The two major surgical approaches for managing breast cancer are mastectomy and breast conserving surgery. The long term survival and local recurrences of breast cancer following the two approaches have proven to be similar. Due to the similarities in prognosis, cosmetic benefits and reduced morbidities the conservative approach is a popular option for both surgeon and patient(1,2).

Recommendations have been set to aid the decision of whether breast conserving surgery is a suitable option. These include:

- Tumour size up to 4 cm in diameter
- Candidate for radiotherapy
- Margin clearance of at least 1 mm(3)

A local recurrence is one which occurs on the same breast as the original tumour. BASO has set a maximum local recurrence rate of 5% after 5 years with a target of less than 3%(4).
I conducted an audit at Ealing Hospital to assess our compliance towards the above recommendations, to determine the local recurrence rate and the impact of certain risk factors on recurrence.

Objectives

The objectives of this audit include the following:

1. To establish the 5 year local recurrence rate at Ealing Hospital
2. To determine compliance towards the recommendations listed above.
3. To determine the impact of the following risk factors on recurrence:
    - Tumour size
    - Margin clearance
    - Triple negative status
    - Nodal Involvement
    - Grade of cancer
    - Age

Methodology

This was a retrospective audit on breast cancer patients at Ealing Hospital in West London. Using a case-control approach I reviewed two groups of patients from Ealing Hospital. One group consisting of all the patients who received breast conserving surgery and radiotherapy between 1st April 2014 to 31st December 2014. I reviewed these patients to determine our 5 year recurrence rate. In total this group was made up of 31 patients. I then removed the patients who had a relapse to make this group the control group.

The second group of patients were provided by a Consultant Histopathologist. This group consisted of 13 patients identified by the Histopathologist to have had a local recurrence within 5 years between 2011 to 2019. This group will be the case group and includes patients who had a relapse between April to December 2014.

By comparing the case group against the control group, we can determine the impact of the aforementioned risk factors on recurrence.

I conducted a retrospective review of information from patient notes, histopathology reports and radiology reports. For both groups I collected data on margin clearance, number of margins involved, size of tumour, triple negative status, nodal involvement, number receiving radiotherapy and location of tumour.

This audit will form part of a larger audit based at other hospital sites that will result in an increased sample size and therefore provide more statistically significant data.

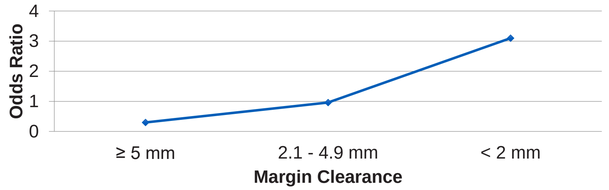
Results

Ealing Hospital 5 Year Local Recurrence Rate: 6.45% (2/31 patients had a recurrence)

Lowest Margin Clearance: The table below shows the percentage of patients in both the recurrence and no recurrence group whose lowest margin clearance was either less than 2 mm, 2.1 to 4.9 mm or ≥5mm. An odds ratio has also been calculated for each range. An Odds ratio (OR) greater than 1 indicates increased risk of recurrence, less than 1 protective and an OR of 1 indicates no association.

Margin clearance range	No recurrence (%)	Recurrence (%)	Percentage ratio	Odds ratio
≤ 2mm	34.5	61.5	1.78	3.1 (p=>0.05)
2.1 – 4.9 mm	24.1	23.1	0.96	0.96 (p=>0.05)
≥ 5 mm	37.9	15.4	0.41	0.3 (p=>0.05)

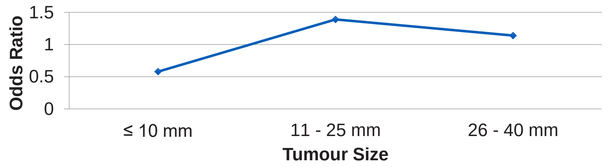
Lowest margin clearance v Odds Ratio



Size of tumour: The recommendation is up to 4 cm in diameter. Only the invasive tumour size is considered.

Size of tumour	No recurrence (%)	Recurrence (%)	Percentage ratio	Odds ratio
≤ 10 mm	24.1	15.4	0.64	0.58 (p=>0.05)
11 - 25 mm	62.1	69.2	1.11	1.39 (p=>0.05)
26 – 40 mm	13.8	15.4	1.12	1.14 (p=>0.05)
> 40 mm	0	0	0	0

Tumour Size v Odds Ratio



Triple negative disease: Odds ratio associated with triple negative disease. Note 86% of the recurrences occurred within 2 years of the surgery.

	No recurrence (%)	Recurrence (%)	Percentage ratio	Odds ratio
triple negative disease	6.9	54	7.82	15.9 (p=<0.05)

Nodal involvement: The percentage of patients in both groups who had at least one node involved.

	No recurrence (%)	Recurrence (%)	Percentage ratio	Odds ratio
Nodal involvement	21	31	1.48	1.72 (p=>0.05)

Results

Grade 3 Cancer: OR = 3 (p=>0.05)

Median age of recurrence group = 53 years (46% of the group was 50 years of age or less)
Median age of non-recurrence group = 61 years (31% of the group was 50 years of age or less)
Median length of recurrence: 1 year and 11 months
92% of recurrences occurred within 3 years.

All patients in this audit received radiotherapy in accordance with recommendations

Discussion

The 5 year local recurrence rate at Ealing Hospital is 6.45%. Due to the small sample size of 31 patients a deviation of 1 would cause a 3.2% change in the recurrence rate. Therefore being only 1.45% above the local recurrence rate set by BASO would imply that Ealing Hospital is meeting the BASO set standards for recurrence.

Data for the lowest margin clearance suggests a clear correlation between increasingly narrow margins and a risk of recurrence. A margin clearance of less than or equal to 2 mm had an OR of 3. A margin of greater than 2 mm had an OR of less than 1 implying protection against recurrence. Note a high OR is required to provide a p value less than 0.05 therefore the correlation of the falling OR with increasing margins shows an association rather than the OR itself.

No patient between April to December 2014 had a tumour greater than 4 cm in size, this is in keeping with current recommendations. There is no strong association between tumour size and recurrence as can be seen from the graph. A tumour between 11 to 25 mm had an Odds Ratio greater than a larger tumour between 26 to 40 mm. Therefore data shows no association between increasing tumour size and risk for relapse.

The strongest risk factor for recurrence is triple negative disease with an Odds Ratio of 15.9 and a p value less than 0.05. Over 4 out of 5 triple negative cancers (86%) recurred within 2 years of surgery. Overall 92% of all recurrences occurred within 3 years with a median length of recurrence of 1 year and 11 months. This would suggest that close surveillance over the first 2 to 3 years following surgery is highly important to detect a relapse of cancer.

According to the OR, Grade 3 cancer and a margin clearance of 2 mm or less both possess the same level of risk, as they both have an OR of 3.

Nodal involvement held an OR of 1.72 however the audit has not considered the impact an increasing number of nodes would have on the probability of cancer relapsing. The OR applies to tumours with 1 or more nodes involved.

There is an 8 year difference between the median age of the recurrence group versus the non-recurrence group. Almost a half of patients belonging to the recurrence group were 50 years of age or less compared to almost a third in the non-recurrence group. That is a 1.5 times difference between the two groups.

Conclusions

A margin clearance of 2mm or less is a risk factor of relapse however a clearance greater than 2 mm is a protective factor. Triple negative cancer is the strongest risk factor with an OR just over 5 times greater than margin clearance or grade 3 cancer. Over 9 out of 10 patients had a relapse within 3 years of surgery, and almost half of all patients with a relapse were 50 years old or less. No tumour size was greater than 4 cm and data did not suggest an increasing tumour size held a greater risk.

An audit with a larger sample size will be planned in order to test this data and provide more assertive conclusions.

Contact

Geetin Majhail
LNWH Trust, Ealing Hospital
Email: geetin.majhail@nhs.net

References

1. Veronesi U, Cascinelli N, Mariani L, Greco M, Saccozzi R, Luini A, Aguilar M, Marubini E. Twenty-year follow-up of a randomized study comparing breast-conserving surgery with radical mastectomy for early breast cancer. New England Journal of Medicine. 2002 Oct 17;347(16):1227-32.
2. Blichert-Toft M, Nielsen M, Düring M, Møller S, Rank F, Overgaard M, Mouridsen HT. Long-term results of breast conserving surgery vs. mastectomy for early stage invasive breast cancer: 20-year follow-up of the Danish randomized DBCG-82TM protocol. Acta oncologica. 2008 Jan 1;47(4):672-81.
3. Parker S, Tomlins A. Clinical Guidelines for the Management of Breast Cancer West Midlands Expert Advisory Group for Breast Cancer [Internet]. 7th ed. West Midlands: West Midlands Expert Advisory Group for Breast Cancer; 2016 [cited 15 November 2020]. Available from: https://www.england.nhs.uk/mids-east/wp-content/uploads/sites/7/2018/02/guidelines-for-the-management-of-breast-cancer-v1.pdf
4. Association of Breast Surgery at Baso 2009. Surgical guidelines for the management of breast cancer. European journal of surgical oncology. 2009 Jan 1;35:S1-22.

Poster 79: Cancer Rate in Thyroid Nodules Classified as Bethesda Category II

Francesk Mulita, MD, MSc, PhDc[1]; Kerasia – Maria Plachouri, MD, PhD[1] ; Konstantinos Panagopoulos, MD, PhD[1]; Ioannis Maroulis, MD, PhD[1]

[1]General University Hospital of Patras

BASO Annual (virtual) Conference
21st -23rd Nov 2020

Introduction

Thyroid nodules are very common and may be found in more than 50% of the population. Fine-needle aspiration cytology (FNAC) of thyroid nodules is a very useful diagnostic tool with high sensitivity and predictive value for diagnosis. The Bethesda System for Reporting Thyroid Cytopathology (BSRTC) uses six categories for thyroid cytology reporting (I-nondiagnostic, II-benign, III-atypia of undetermined significance (AUS)/follicular lesion of undetermined significance (FLUS), IV-follicular neoplasm/suspicious for follicular neoplasm (SFN), V-suspicious for malignancy, and VI-malignant. Our objective was to determine the malignancy rate in Bethesda II nodules).

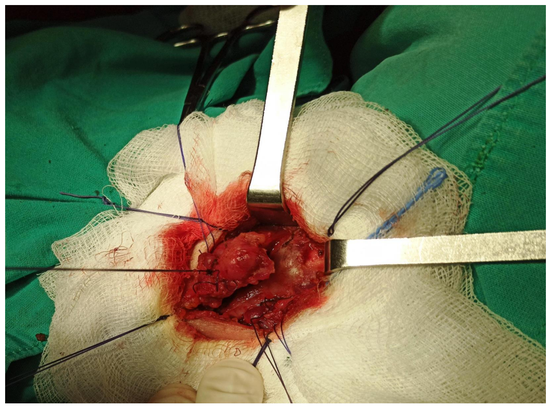


Figure 1. Thyroidectomy in a 20-year old patient for Bethesda II nodule

Methods and Materials

From June, 2010 to May, 2020 a retrospective analysis was performed among 1166 patients who underwent thyroid surgery for benign thyroid diseases in our institution. Thyroid cytopathological slides and Ultrasound (US) reports were reviewed and classified according to the BSRTC. Data collected included age, gender, cytological features and histological type of thyroid cancer.

Results

During the study period, 44.77% (522/1166) of patients with a FNA categorized as Bethesda II underwent thyroid surgery. Incidental malignancy was found in 1.53% (8/522) cases of Bethesda II .The most common malignant tumor type was the papillary thyroid carcinoma.

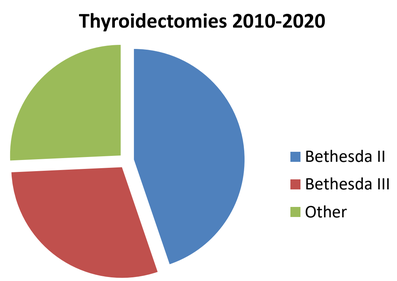


Chart 1. Histopathology of 1166 patients who underwent thyroidectomy from June, 2010 to May, 2020.

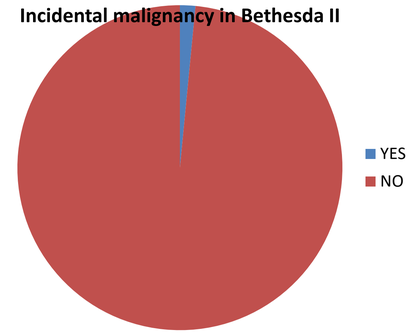


Chart 2. Malignancy found in 522 patients with FNA categorized as Bethesda II

Discussion

Out of 522 patients with FNA categorized as Bethesda II who underwent thyroidectomy, malignancy was found in only 8 cases (1.53%).

Conclusion

The current study demonstrates that incidental thyroid carcinoma can be diagnosed after thyroidectomy even in patients with an FNA categorized as Bethesda II.

Contact
<Francesk Mulita>
<General University Hospital of Patras>
Email: oknarfmulita@hotmail.com
Website: https://www.researchgate.net/profile/Francesk_Mulita
Phone: +306982785142

References

1) Mulita F, Anjum F. Thyroid Adenoma. 2020 Sep 15. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2020 Jan–. PMID: 32965923.
2) Alshaikh S, Harb Z, Aljufairi E, Almahari SA. Classification of thyroid fine-needle aspiration cytology into Bethesda categories: An institutional experience and review of the literature. *Cytojournal.* 2018;15:4. Published 2018 Feb 16. doi:10.4103/cytojournal.cytojournal_32_17

Poster 80: Breast cancer surgery during the COVID-19 pandemic: A prospective observational study in a single centre

Rory Callan, General Surgical Registrar[1]; Masoom Muttalib, Consultant Breast and Oncoplastic Surgeon[1]
[1]Department of Breast Surgery, Bedfordshire Hospitals NHS Foundation Trust

2020 BASO Annual (virtual) Meeting
21st – 23rd Nov

Introduction / Background

The COVID-19 climate has required an unprecedented change in the provision of surgical care. Breast cancer surgery has continued across all regions of the UK, with guidance from multiple advisory bodies including BASO[1].

The Bedford Hospital site conducts the full range of breast cancer and reconstructive procedures. During the COVID-19 pandemic, breast cancer surgery continued at our unit, in line with guidance from BASO and other authoritative bodies.

We prospectively conducted an observational study over the 6 month period (March – September 2020) implementing clinic and theatre changes during the time of national lockdown, through to easing, and subsequent measures emerging in the threat of a second wave infective spike (at the time of writing).

Methods

Data was gathered regarding new-patient clinic referrals and surgical / breast reconstructive procedures for one consultant which would ordinarily attract an overnight stay, with comparison to the preceding 6 month period (March – September 2019). There was no change in practice to breast conserving operations per se being a day case procedure, which therefore was not further studied. Modifications in practice were recorded, including

- Use of telephone clinic triage
- Implementation of drain-free axillary clearances, and mastectomies via cyanoacrylate glue
- Re-excision of incomplete margins under local anaesthetic
- Non-radioisotope localisation of sentinel nodes

These changes were aimed at reducing patient hospital patient visits, duration of stay and transit to other departments, and therefore potential COVID-19 exposure. Patients were segregated with social distancing (2m) measures into “clean green” areas, with pre-op COVID-19 test 3 days prior to surgery. In September 2020, the patient self-isolation period was reduced from 14 days to 3 days as per NHS England guidance. Ward and theatre staff underwent weekly COVID-19 testing. We reviewed length of stay data and complications to determine the impact of these measures.

Conclusions

Our surgical unit practice has evolved to meet the challenge set by COVID-19, in the face of patient concerns for coming into hospital, and the reduction in breast cancer theatre slots as a contingency for the pandemic.

No patients gained a hospital acquired coronavirus infection peri-operatively. The modifications have partly reduced the impact of reduced GP referrals, although screening referrals could not be otherwise compensated for.

Local anaesthetic re-excision of margins remain well-tolerated by patients and avoids aerosol generating anaesthesia. Drainless mastectomy and axillary clearance have resulted in an appreciable seroma rate (within the size limitations of the study), but is safe as no patient required re-operation.

The measures have also resulted in cost-savings to the hospital, and might usefully be continued, whether the pandemic settles or evolves into a chronic situation.

Results

New-patient clinic attendances fell from 342 to 208 (39.2 % reduction) although 48 telephone triage consultations partly compensated for this in 2020, making the true reduction in referrals at 25.1% **(Figure 1).** Possible explanations include patients reluctance to attend clinic during the height of the pandemic and GPs mainly referring directly without patient examination.

Localisation cases fell from 24 to 15, mainly explained by the regional screening unit deferring their assessments and consequent referrals**.** Additionally, patients with neoadjuvant chemotherapy requiring localisation surgery for a complete radiological response, reduced from 3 to 1 case.

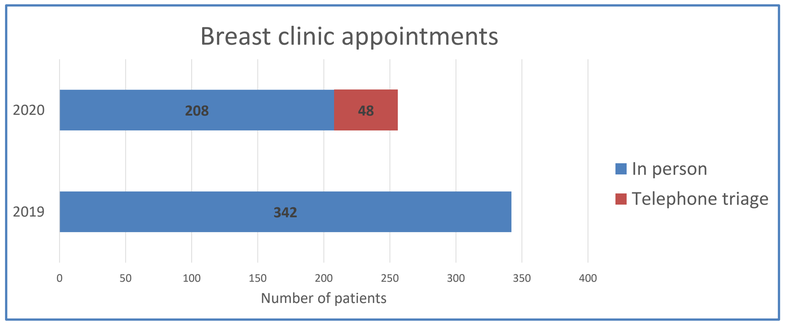


Figure 1. Number of breast clinic appointments in 2019 and corresponding 2020 period.

There were 22 mastectomies in the 2019 period compared to 10 in the 2020 cohort (a 54.5% reduction) **(Figure 2)**. However all ten were drainless mastectomies using cyanoacrylate glue.

3 of these (30%) proceeded to seroma drainage in clinic, but no re-operations were required. 11 patients proceeded to immediate implant or myocutaneous flap reconstructions in the 2019 period, whereas this was nil in 2020, in-keeping with the multiple guidance recommendations[2].

Reconstructive surgery resumed in October 2020 at our unit.

Figure 2. Total mastectomies in 2019 and 2020 cohorts.

Re-excision of incomplete margins were performed under local anaesthetic prior to COVID-19, and remained static at 4 cases in 2020.

39 sentinel nodes localisations were performed in the 2019 cohort compared with 21 (46.2% reduction) in the 2020 cohort. However, during the COVID-19 pandemic these were all blue-dye (patent blue V) guided in order to reduce patient transit in hospital. Only one case required an axillary sample owing to a dilated lymphatic being found. The use of blue dye instead of radio-isotope resulted in a cost saving of 18 x (£1200-£40) = £20,880 for the period (including isotope courier transport costs). All patients had day case (<23h stay) besides one patient who had a planned overnight stay for social reasons.

39 sentinel node localisations in 2019

compared to **21** in 2020.

Cost of blue dye £40 vs radio-isotope

£1200 for sentinel node biopsy

Contact

Mr Rory Callan
Bedfordshire Hospitals NHS Foundation Trust
rory.callan@live.com

References

1.Pragmatic Management of Breast Cancer during COVID-19 , BASO, March 2020.
https://baso.org.uk/media/98159/covid_19_and_breast_ca

Poster 81: Day case Mastectomy Audit: University Hospitals of Leicester (UHL)Review of Practice

Ms Oluwabukola Olaitan[1]; Ms Javeria Iqbal[1]; Mr Walid Sasi[1]
[1]University Hospitals of Leicester – Glenfield General Hospital

BASO~ACS

2020 BASO Annual (virtual) Meeting
21st – 23rd Nov

Introduction

In the UK, day surgery is defined as a patient being admitted to hospital for a planned procedure and discharged home on the same calendar day. This typically includes a stay of 4–6 h, but with more complex surgical procedures, longer stays may be required. The procedure must have been planned and booked as a day case before the patient's admission to hospital. (1)

Advantages of day surgery are:

- High turnover of patients thereby reducing surgical waiting lists
- Low incidence of major morbidity and reduced cross-infection risks
- Patient preference with patient surveys showing high levels of satisfaction with day case treatment
- Minimal disruption to patient's daily routine

Audit Standards/Objectives

In 2009, the British Association of Day Surgery (BADS) worked with the Department of Health to develop the concept of 'Best Practice Tariff' to incentivize day surgery. They identified key procedures where a financial incentive of approximately £300 per case would be awarded if the patient was booked and managed on a day-case basis.

Breast surgery	Excision of breast lump
	Simple mastectomy
	Sentinel node biopsy
	Axillary clearance

Standards – BADS recommends a day case target rate of 30% for mastectomies

Objectives - Establish day case mastectomy rate at UHL (Glenfield and Nuffield hospitals)

- Identify factors preventing day case mastectomies at UHL.

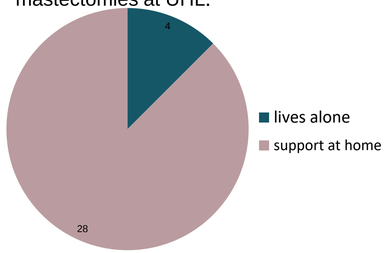


Figure 1. Patient demographics: Home support or lives alone..

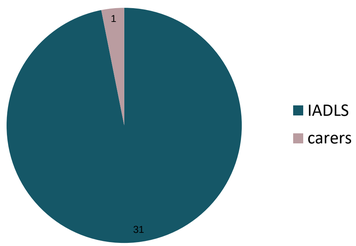
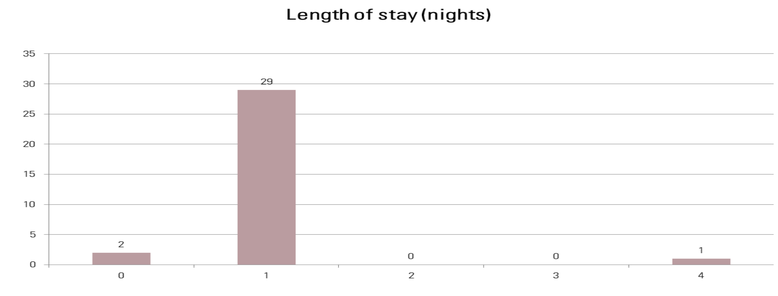


Figure 2. Patient demographics: Fully independent or had carers.

Methods

Retrospective review of patients who underwent simple mastectomy +/- sentinel lymph node biopsy between Jan and August 2020. Case notes were reviewed to determine length of stay and identify factors that could affect length of stay. Factors recorded were: distance from hospital, social status, age, co-morbidities, postoperative discharge instructions by surgeons and use of surgical drains. Ward Nurses were also interviewed regarding factors that might cause delayed discharge and patient opinions were sought on the matter.

Figure 3. Length of stay (nights)



Results

Data - 32 patients were included in the audit.
Demographics - Age range was 31 – 84 years, all patients lived < 1-hour drive from the hospital, 4 patients lived alone, and 31 patients were fully independent. 9 Patients had co-morbidities including DM , HTN,IHD, previous PE etc.
Surgery – All patients had a drain inserted intraoperatively and only 4 operation notes mentioned same day discharge.
Post – op: Length of stay was 0 – 4 days. 29 patients were discharged the next day, only 2 (6.25%) patients were discharged on the same day
Nurses' opinions - Nurses gave mixed reviews about day case mastectomies, citing concerns such as drains, patients being operated on too late in the day and being too flat post-operatively. One nurse noted that patients had to be psychologically prepared for same day discharge.
Patient's thoughts – There was a mix between patients wanting to be discharged on the same day and patients wanting same day discharge and patients preferring to stay in.

Table 1: Summary of patient interviews

Patients discharged as day case	Patients not same day discharge
69 years old. No medical issues Lives alone (but friend lives very near) ,12 miles from the hospital. Was discharged with drain Had no issues going home the same day and was happy with everything.	Mrs A - No medical issues, lives 15 miles form the hospital Has support at home Would not have preferred going home the same day as had a funny colour and needed help going to the toilet.
	Mrs B - 70 years old ,no medical issues lives 10 miles from the hospital Has support at home Wanted to go home the same day but was done late on this list.
	Mrs C 48 years old History of UC and chronic Fatigue. Lives 10-15 miles from the hospital. Would not have preferred same day discharge as felt lethargic and couldn't walk

Discussion

UHL breast unit not achieving BADS 30% target for same day mastectomies due to multiple factors - Post-op instructions, routine use of drains, ward staff concerns and the expectation that patients will stay overnight. Patient factors deterring day case mastectomies were uncommon..

Action Plan

- Consider day surgery as the default for all elective surgery—ask why not? Rather than why?
- Effective preoperative preparation is essential for day surgery success.
- Identify suitable patients in the clinic and pre-assessment.
- Planned earlier in the day.
- Patient made psychologically aware of the option.
- Mentioned in the postoperative instructions.
- Use of pectoral/serratus blocks.
- Anaesthetic techniques aiming to maximize recovery, minimize postoperative discomfort (pain, nausea, vomiting), and promote early safe discharge.
- Efficient day surgery processes are facilitated by protocol-driven nurse-led discharge.
- Re-Audit.

"I think it's the drains and the dressings as much as anything. It's difficult for people to have all their stuff together on the same day. Patients come back from theatre pretty woozy. A lot of them won't even look at their drains the day of their surgery. How can they go home like that?"

Nurse quote 1

"As long as they are fit, healthy, young, are done first on the list, have good support at home, are generally sensible, I don't have a problem with it. If they have concerns overnight they can call the ward. If it was me, someone in my age group, I'd want to go home same day. But there has to be a set of real criteria."

Nurse quote 2

University Hospitals of Leicester NHS
NHS Trust
Caring at its best

Contact

Oluwabukola Olaitan
University Hospitals of Leicester
Email: bukky.mola@gmail.com

References

1. Daniel J Guemby, MBBS(Hons) BSc(Hons) BSc Med Sci, MIBiol MRCS FRCA, Mary E Stocker, MA (Oxon) MBChB FRCA. Day surgery development and practice: key factors for a successful pathway. *Continuing Education in Anaesthesia Critical Care & Pain*, Volume 14, Issue 6, December 2014, Pages 256–261. https://doi.org/10.1093/bjaceaccp/mku066

Poster 89: Management of Post Rectal Masses: A Rare Cause of Malignancy

Miss Catherine Zabkiewicz[1,2] Mr. Faris Soliman[1,2] Miss Rachel Hargest[1,2]
[1]Cardiff and Vale University Health Board, [2]Cardiff University

2020 BASO Annual (virtual) Meeting
21st – 23rd Nov

Introduction / Background

The post rectal (retro-rectal or pre sacral) space is above the pre sacral fascia between the sacrum and the upper 2/3rds of the rectum, at the point where the embryological hindgut and neuroectoderm fuse[1](Figure 1). As a result, this region has the potential for developing a variety of unusual masses, ranging from benign cysts to frank malignancy (Table 1). True incidence is unknown. Patients can present incidentally, or with a range of pelvic and back symptoms, often subtle, with delayed diagnosis. As a rare entity, case series of post rectal masses (PRM) are uncommon, and despite advances in imaging and adjuvant treatments, surgical excision can result in significant morbidity.

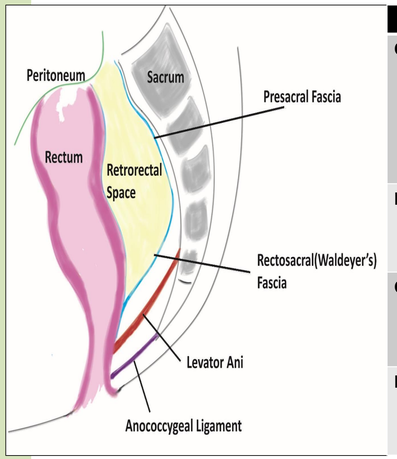


Figure 1. Post Rectal or Retrorectal space lies next to the upper rectum, bounded inferiorly by Waldeyer's fascia. As well as connective tissue, it contains vessels and components of the autonomic nervous system.

	Benign	Malignant
Congenital	Cysts (dermoid, teratoma) Duplication cyst Meningocoele	Chordoma Teratocarcinoma
Neurogenic	Neurofibroma Schwannoma	Neuroblastoma Neurofibrosarcoma
Osseous	Giant cell tumour Osteoblastoma	Chondrosarcoma Osteosarcoma
Miscellaneous	Lipoma Fibroma Desmoid	Leiomyosarcoma Fibrosarcoma

Table 1. Types of post rectal mass

Methods and Materials

- Retrospective review of consecutive cases of PRM presenting at a single tertiary centre
- 2013–2019
- 10 patients identified
- Case notes reviewed demographics, investigations(radiology, histopathology), operative approach and operative outcomes and complications

Results

- 10 patients (6F:4M). Mean age 35.5years (17-70)

PRESENTATION:
- 6 (60%) incidental presentation from imaging, 4 of which became symptomatic
- 3 symptomatic: pain, neurological, functional bowel
- 1 suspected recurrence from previous resection(meningocoele)

DIAGNOSTICS:
- All - pre-operative MRI
- 8 - CT
- 4 - ultrasound imaging
- 3 - pre-operative biopsy for resection planning

PATHOLOGY
- 4 (40%) - pre-existing congenital abnormalities, including neurofibromatosis, Hirschsprung's, spina bifida and Currarino's triad.
- 7 - benign - teratoma *see Figure 2*, inclusion cyst, schwannoma and meningomyelocele
- 3 malignant - neurofibrosarcoma *see Figure 3*, chordoma

SURGERY:
- 3 - posterior/Kraske procedure
- 2 - anterior open procedure
- 3 - combined anterior/posterior approach
- 2 - benign lesions non operative surveillance

MORBIDITY and MORTALITY
- 1 - Temporary defunctioning colostomy
- 2 - permanent colostomy (AP resection)
- 1 - massive Intraoperative haemorrhage
- 2 - pelvic collection requiring USS drainage
- Neurofibrosarcoma early recurrence and death (R1 resection)
- Chordoma bone metastases (R1 resection)

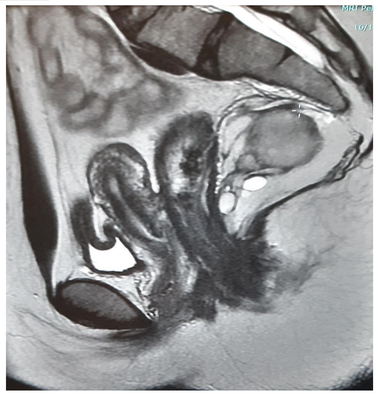


Figure 2. MRI (T2 image) of mature teratoma in a patient with previous surgery for Currarino's triad (sacral agenesis, imperforate anus, PSM). The lesion is well defined and cystic. Resection was undertaken as the PSM was enlarging on MRI surveillance and had developed more solid components

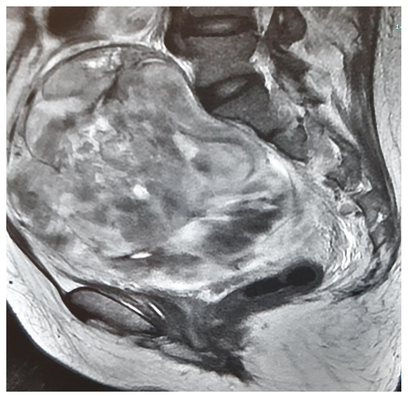


Figure 3. MRI(T2 image) of aggressive Neurofibrosarcoma, displacing rectum and small intestine, requiring an extensive anterior approach resection. Early recurrence occurred and despite radiotherapy the patient died 2 months after operation

Discussion

- PRM - rare entity with a wide variety of pathology, presentation and outcomes. Majority of incidental diagnoses, although many of these developed symptoms necessitating intervention
- Back or pelvic pain, as well as neurological symptoms were common. Nonspecific symptoms can delay diagnosis. Clinical scenarios that should raise suspicion of a retrorectal lesion include unexpected obstruction during vaginal delivery and repeated treatment of a presumed perianal fistula. A proportion also have congenital abnormalities such as Currarino's triad (sacral agenesis, anal atresia and pre sacral mass) [2]
- Traditionally PRM were resected due to malignant potential, however, with increasing imaging accuracy, some patients can undergo surveillance (Figure 4). MRI is most sensitive and specific for detecting malignant disease and cystic lesions more accurately defined as benign than solid lesions[3]. Two patients in this series are under ongoing surveillance for asymptomatic, radiologically benign lesions
- The role of biopsy remains controversial. Improved imaging may make biopsy unnecessary, there is a risk of malignant seeding in the tract, and it may not alter management[3] . However, biopsy has been shown to be safe, more sensitive and specific than imaging and can help plan surgery and neoadjuvant therapy[1,4].
- Optimal outcome is dependant on an MDT selecting the correct operative approach and involving surgeons with the required expertise
- Surgical approach for resection is either posterior (perineal/Kraske) for lesions below S3 level, or anterior (abdominal) or combined for those lesions at/above the midbody of S3.
- Significant morbidity or complications can occur - major haemorrhage, rectal resection, and anastomosis or colostomy, sacral nerve resection, dural leak and large perineal defects requiring flap reconstructions[1,2]
- For malignant lesions, despite adequate resection, recurrence rates are in the order of 28-70%, and 5-yesurvival ranging from 17-70% depending on the tumour type[3]. Indeed, the malignant PRMs ar in our cohort have suffered recurrence, with one death. The outcome for fully resected benign lesions on the other hand is excellent

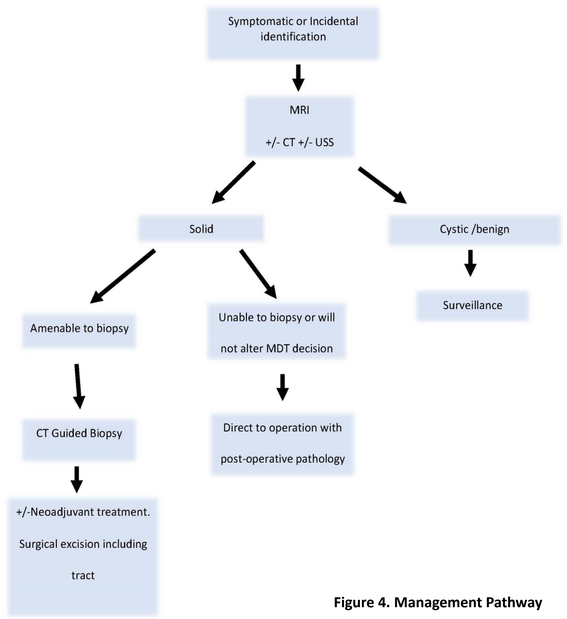


Figure 4. Management Pathway

Conclusions

Whilst many PRM are benign, the borderline and malignant lesions can be catastrophic for patients.
A multidisciplinary approach and good quality imaging are crucial to management.
Lesion nature, morphology, and anatomical location influence the surgical approach and potential outcomes.

Contact

Miss Catherine Zabkiewicz
NHS Wales
Email:Catherine.zabkiewicz@nhs.wales.uk

References

1. Neale JA. Retrorectal tumors. Clin Colon Rectal Surg. 2011 Sep;24(3):149-60. doi: 10.1055/s-0031-1285999. PMID: 22942797; PMCID: PMC3311502.
2. Reiter MJ Surgical Management of Retrorectal Lesions: What the Radiologist Needs to Know.American Journal of Roentgenology 2015 204:2, 386-395
3. Hopper L, Eglinton TW, Wakeman C, Dobbs BR, Dixon L, Frizelle FA. Progress in the management of retrorectal tumours. Colorectal Dis. 2016 Apr;18(4):410-7. doi: 10.1111/codi.13117. PMID: 26367385.
4. Merchea A, Larson DW, Hubner M, Wenger DE, Rose PS, Dozois EJ. The value of preoperative biopsy in the management of solid presacral tumors. Dis Colon Rectum. 2013 Jun;56(6):756-60. doi: 10.1097/DCR.0b013e3182788c77. PMID: 23652750.

Poster 93: Outcomes of Watch and Wait (WW) in Rectal Cancer Patients – Largest Single Centre Series in United Kingdom

Kaul S, Mane R, Khan A, Bhargava A, Hanson M, Banerjee S, Ball S, Boulton R, Huang J, Rajendran N

Barking, Havering and Redbridge University Hospitals NHS Trust

BASO~ACS

2020 BASO Annual (virtual) Meeting
21st – 23rd Nov

Introduction

'**Watch-and-Wait' is an organ preserving method of treating rectal cancer non-operatively**, first pioneered by Dr Angelita Habr-Gama in 2004(1). It is found that with neoadjuvant chemoradiotherapy for rectal cancers we can not only achieve improved local control but also a complete tumour response (2).

A complete pathological response (pCR) coded ypT0N0 is a more favourable prognosis in rectal cancer seen in 10-20% of patients (3) but due to uncertainty a surgical resection follows to confirm this finding. It has been reported that there has been no significant difference(4) between the demographics of either clinical or pathological complete responders and therefore 'Wait and Watch' after long-course chemoradiotherapy has been gaining interest worldwide as a more conservative method of treatment.

This study uses the largest dataset from a single centre in the UK to evaluate whether the 'Watch and Wait' approach is as safe and efficacious (5) as literature states in the real world.

Objectives: The aim of this study is to analyse the different outcomes of 'Watch and Wait' patients with rectal cancer who achieved a clinical complete response to neoadjuvant therapy over a 7 year period.

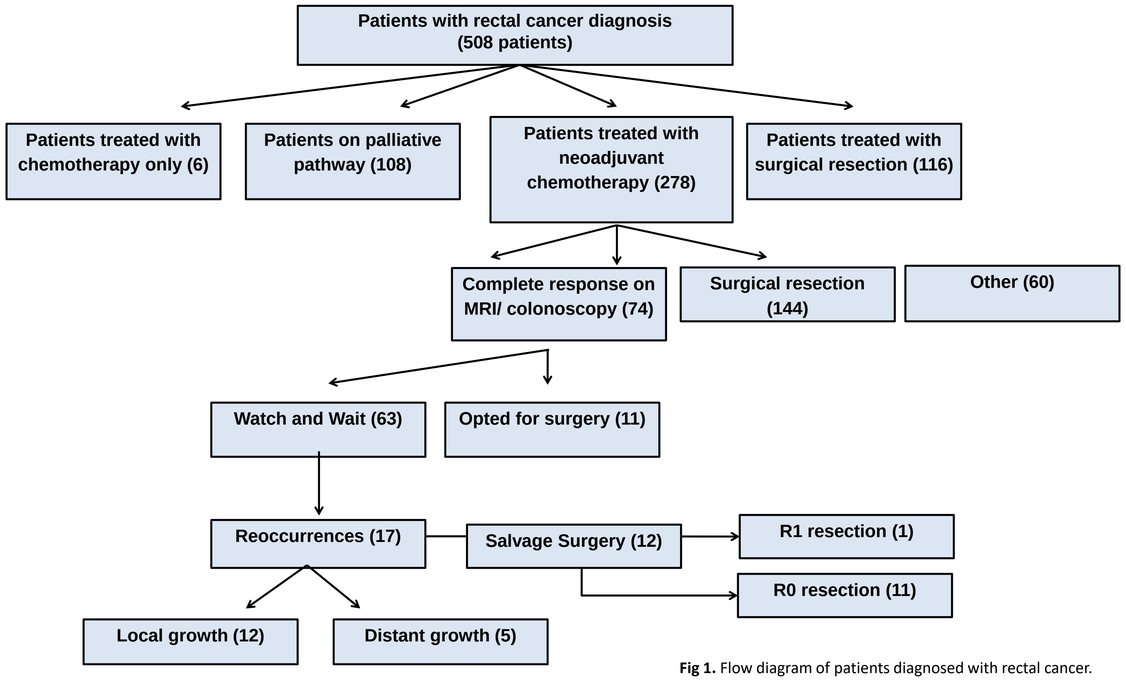


Fig 1. Flow diagram of patients diagnosed with rectal cancer.

Methods and Materials

A retrospective analysis was performed on rectal carcinoma patients diagnosed at BHRUT from **May 2013 to June 2020**. Electronic health records such Somerset Cancer register and Trust software –EPRO, Cyberlab were utilised. 508 rectal cancer patients were identified as having undergone treatment at our trust. **278 had neoadjuvant chemotherapy (NACRT) with curative intent.** 230 were excluded from the analysis as they had: surgery without NACRT, palliative treatment or treatment outside the 'Watch and Wait' protocol. (*Refer to fig.1).* From the 74 patients that achieved complete clinical response identified using either MRI imaging or endoscopy techniques, **63 were selected for 'Watch and Wait'.**

The 'Primary outcomes' used to analyse its safety and efficacy included: Median overall survival, Disease Free Survival, Recurrence Rate, R0 Salvage Surgery Rate and Distant failure.

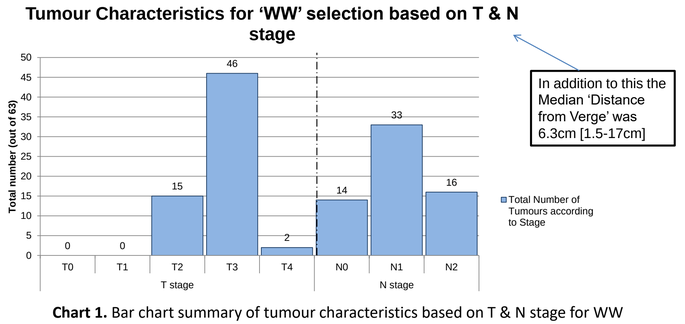


Chart 1. Bar chart summary of tumour characteristics based on T & N stage for WW selection

Primary Outcome	Results
Median Overall Survival	1103 days
Disease Free Survival	778 days
Recurrence Rate	27%
R0 Salvage Surgery Rate	83.3%
Distant Failure Rate	29.4%

Table 1. Table of summary results of Primary Outcomes

Results

As of July 4th 2020 278 out of 508 rectal cancer patients underwent long-course chemoradiotherapy. 74/278 NACRT achieved a complete response. 63 patients were selected for 'Watch-and-Wait' after a median of 97[88-124] days, whereas 11 opted for surgery. Overall survival amongst 'Watch-and-Wait' patients' was 85.7% with a median overall survival of 1103[717-1484] days. The recurrence rate of these patients' was 27.0%(17) of which the 5 developed distant metastases. Disease free survival in recurrences was 253 days after which 70.6% underwent salvage surgery -83.3% and 16.7% performed with R0 and R1 margins respectively.

Discussion

The results show that organ preservation with WW is an acceptable alternative but recurrence and metastatic rates are in-line with previous series. The incidence of salvage resections yielding R1 rates was 16.7%. Our data is a real world reflection and not registry based and hence may present a larger R1 resection rate than recently published series.

Conclusions

1. 27% of WW patients in this real world cohort developed recurrence and 5/17 failed distantly .
2. It is importance to create individual patient-centered treatment plans based on risk factors which lead to recurrences to correctly identify successful patients for Wait-and-Watch from unsuccessful
3. To guide and support patient preference and their decision-making autonomy to make a well-informed decision.

Contact

Dr Rashi Mane
NHS-BHRUT General Surgery
Email: rashi.mane@nhs.net
Phone:

References

1. Habr-Gama A, Perez RO, Nadalin W, et al. Operative versus nonoperative treatment for stage 0 distal rectal cancer following chemoradiation therapy: long-term results. *Ann Surg*. 2004;240(4):711-718.
2. *Journal of Clinical Oncology* 30, no. 15 (May 20, 2012) 1770-1776.
3. Lim, Y.J., Kim, Y. & Kong, M. Adjuvant chemotherapy in rectal cancer patients who achieved a pathological complete response after preoperative chemoradiotherapy: a systematic review and meta-analysis. *Sci Rep* **9,** 10008 (2019). https://doi.org/10.1038/s41598-019-46457-5
4. Onaitis MW, Noone RB, Fields R, Hurwitz H, Morse M, Jowell P, McGrath K, Lee C, Anscher MS, Clary B, Mantyh C, Pappas TN, Ludwig K, Seigler HF, Tyler DS. Complete response to neoadjuvant chemoradiation for rectal cancer does not influence survival. Ann Surg Oncol. 2001 Dec;8(10):801-6. doi: 10.1007/s10434-001-0801-2. PMID: 11776494.
5. Smith, James D. MD+; Ruby, Jeannine A. MD+; Goodman, Karyn A. MD+; Saltz, Leonard B. MD+; Guillem, José G. MD+; Weiser, Martin R. MD+; Temple, Larissa K. MD+; Nash, Garrett M. MD+; Paty, Philip B. MD+ Nonoperative Management of Rectal Cancer With Complete Clinical Response After Neoadjuvant Therapy, Annals of Surgery: December 2012 - Volume 256 - Issue 6 - p 965-972 doi: 10.1097/SLA.0b013e3182759f1c

Poster 94: The role of expedited adjuvant intraperitoneal chemotherapy in locally advanced colorectal cancer

Yu-Hsuen Yang[1], Bassil Azam[1], Mahmoud Al-Aaraj[1],, Louise Kuo[2], Nirooshun Rajendran[1], Joseph Huang[1], Sandeep Kaul[1]
[1]Queens Hospital, Romford, United Kingdom
[2]Royal Berkshire Hospital, Reading, United Kingdom

BASO~ACS
2020 BASO Annual (virtual) Meeting
21st – 23rd Nov

Background

- Locally advanced colorectal cancer (LACRC) is defined as T4, N0-2 and M0 tumours
- These frequently metastasize intraperitoneally and augur significant morbidity and mortality
- Expedited adjuvant intraperitoneal chemotherapy is delivered within one month after cytoreductive surgery
- This targets micro-metastatic deposits from the primary tumour which progress to peritoneal carcinomatosis
- We systematically reviewed the effect of expedited intraperitoneal chemotherapy delivered within a month of cytoreductive surgery on outcomes in LACRC

Objectives

This study aims to systematically review the effects of expedited adjuvant intraperitoneal chemotherapy in LACRC:

1. Survival benefit – overall survival and progression-free survival
2. Adverse effects

Methods

- A literature search of all studies indexed on the MEDLINE from inception to September 2020 was performed
- Only randomised controlled trials pertaining to participants with LACRC, and who received intraperitoneal chemotherapy within a month of cytoreductive surgery were included (***Figure 1***)

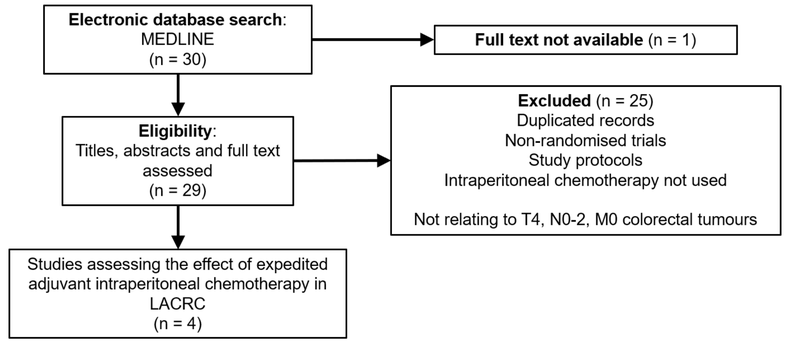


Figure 1. PRISMA flowchart depicting selection of studies for this review

Results

- Four randomised trials identified
- Outcomes for 2567 patients (***Table 1***)
- 622 patients received expedited intraperitoneal chemotherapy
- One study (Scheithauer, 1998) reported a significant survival benefit and reduction in peritoneal metastases in favour of adjuvant intraperitoneal chemotherapy
- Two studies (Vaillant, 2000 and Nordlinger, 2005) were suggestive of improved outcomes
- One study (Klaver, 2019) did not suggest improved outcomes
- Substantial heterogeneity in treatment protocols and measurement of outcomes was noted

Discussion

- This is the first review of adjuvant intraperitoneal chemotherapy in colorectal which considers the timing of its delivery and its use in T4 tumours
- Although the COLOPEC study (Klaver, 2019) does not support the use of adjuvant intraperitoneal chemotherapy, its internal validity has been called into question
- Evidence on expedited adjuvant intraperitoneal chemotherapy in LACRC obtained from this review is dated and limited, but points towards improved outcome

Conclusions

The study systemically reviewed four randomized controlled trials encompassing 622 patients receiving expedited intraperitoneal chemotherapy within a month of cytoreductive surgery. The results were suggestive or survival benefit and improved overall outcome, thereby highlighting the need for further randomised trials in expedited intraperitoneal chemotherapy.

.	Klaver, 2019	Nordlinger, 2005	Scheithauer, 1998	Vaillant, 2000
Number of Particpants	202	1857	241	267
Number of LACRC	175	735	116	88
Number receiving IPC	8	415	78	121

Table 1. The total number of patients, those with LACRC and those who received intraperitoneal chemotherapy for each study

Barking, Havering and Redbridge University Hospitals NHS Trust

Contact

Yu-Hsuen Yang
Queen's Hospital, Romford, United Kingdom
Email: yuhsuen.yang@gmail.com

References

1. Klaver CEL, et al. Locally Advanced Colorectal Cancer: True Peritoneal Tumor Penetration is Associated with Peritoneal Metastases. Ann Surg Oncol. 2018. doi: 10.1245/s10434-017-6037-6.
2. Klaver CEL et al. and the COLOPEC collaborators group. Adjuvant hyperthermic intraperitoneal chemotherapy in patients with locally advanced colon cancer (COLOPEC): a multicentre, open-label, randomised trial. Lancet Gastroenterol Hepatol. 2019. doi: 10.1016/S2468-1253(19)30239-0.
3. Nordlinger B et al. Adjuvant regional chemotherapy and systemic chemotherapy versus systemic chemotherapy alone in patients with stage II-III colorectal cancer: a multicentre randomised controlled phase III trial. Lancet Oncol. 2005. doi: 10.1016/S1470-2045(05)70222-9.
4. Scheithauer W et al. Combined intravenous and intraperitoneal chemotherapy with fluorouracil + leucovorin vs fluorouracil + levamisole for adjuvant therapy of resected colon carcinoma. Br J Cancer. 1998. doi: 10.1038/bjc.1998.225.
5. Vaillant JC, et al. Adjuvant intraperitoneal 5-fluorouracil in high-risk colon cancer: A multicenter phase III trial. doi: 10.1097/00000658-200004000-00001.

Poster 98. Retrospective analysis of risk factors for progression to fracture in patients with metastatic bone disease (MBD)

Samantha Downie[1]; Alison Stillie[2]; Matthew Moran[2]; Cathie Sudlow[1] & Hamish Simpson[1]
[1]University of Edinburgh, [2]NHS Lothian

2020 BASO Annual (virtual) Meeting
21st – 23rd Nov

LAY SUMMARY

Outcomes in metastatic bone disease (MBD) are better if surgery is undertaken before a bone lesion causes a fracture.

Current scoring systems to predict which metastases will fracture do not take into account patient variables and so are often inaccurate and lead to unnecessary surgery.

This pilot study determines the sample size required for a large multivariate analysis to determine which patient factors predict risk of pathological fracture in patients with MBD.

Background

Outcomes after surgery for bone metastases are better for prophylactic surgery than after patients sustain a pathological fracture[1,2].

There is a poor evidence-base for predicting risk of pathological fracture in patients with bone metastases.

Clinical Orthopaedics and Related Research

TABLE 1. Scoring System

	Score		
Variable	*1*	*2*	*3*
Site	Upper limb	Lower limb	Peritrochanter
Pain	Mild	Moderate	Functional
Lesion	Blastic	Mixed	Lytic
Size	<1/3	1/3–2/3	>2/3

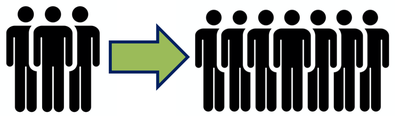
Radiological scoring systems like Mirels fail to incorporate patient-specific variables like primary cancer type and patient age[3,4].

Objectives

The aim was to identify predictors of fracture at 12 months in patients with long bone metastases.

Methods and Materials

This was a pilot study of 60 consecutive patients to power a larger multivariate regression analysis



Inclusion

- New long bone metastasis
- Visible on x-ray/CT

Exclusion

- Fracture
- Surgery/death within 3m of diagnosis

A literature review identified 15 potential predictors of fracture (**Table**)

Results

The pilot study included 101 lesions in 60 patients:

52% 31/60 | 48% 29/60

69.1y (mean) range 28-91y

70% dead 71/101, median survival 159 days

28% alive 28/101, mean follow-up 1.9 years

13.9% fracture rate at 12 months (14/101)

Patient variables for pathological fracture risk	
1	Age
2	Gender
3	Cognitive impairment +/- risk of falls
4	Primary cancer diagnosis
5	Prior radiotherapy to affected bone
6	Prior bisphosphonate treatment
7	Osteoporosis
8	Metastatic load (organs involved)
9	Pain (opiate use yes/no)
10	Radiographic appearance
11	Location of metastasis
12	Extent of cortical destruction (on x-ray)
13	Mirels score
14	Multiple metastases within affected bone
15	Elevated alkaline phosphatase (ALP)

Results 2

In this cohort, **factors associated with ↑ fracture rate** included:

Mirels score (p=0.015)
27% vs 8%
9/34 Mirels ≥9 | 5/65 Mirels <9

X-ray appearance (p=0.0017)
28% vs 2%
11/40 Lytic | 1/42 Mixed

With a fracture rate of 13.9%, a **sample size of 1055 lesions** will identify which of the 15 variables of interest are associated with ↑ risk of fracture (95% confidence level, error margins 4-4.5).

Conclusions

Predicting risk of pathological fracture is vital in managing patients with bone metastases to **avoid unnecessary surgery**.

This pilot study has generated a recommended sample size to validate the 15 variables of interest, and provided early evidence for their utility in predicting pathological fractures.

TAKE HOME MESSAGES

- Current methods to predict risk of pathological fracture in bone metastases (e.g. Mirels) do not account for the high heterogeneity in patients with systemic cancer
- We have identified 15 patient variables that could influence risk of pathological fracture
- This pilot study demonstrates a 13.9% fracture rate, recommending a sample size of 1055 to investigate the 15 variables of interest

CONTACT

Mrs Samantha Downie, PhD Student
University of Edinburgh, Scotland UK
Samantha.downie3@nhs.scot

THANKS TO:

Study funders (AO UK, RCSEd & Robertson Trust)
PhD supervisors

REFERENCES

[1]Jonas SC *et al.* Current orthopaedic management of bony metastases in the proximal third of the femur. Hip International. 2017 Jan;27(1):1-7.
[2]Khodabukus A *et al.* Surgery for metastatic lesions of the femur: good outcome after 245 operations in 216 patients. Injury. 2008 Apr;39(4):404-410.
[3]Mirels H. The classic: metastatic disease in long bones: a proposed scoring system for diagnosing impending pathologic fractures. Clin Orthop Relat Res. 2003 Oct;415:S4-S13.
[4]Van der Linden YM *et al.* Comparative analysis of risk factors for pathological fracture with femoral metastases. J Bone Joint Surg Br. 2004 May;86(4):566-73. PMID: 15174555.

Poster 100: Landiolol hydrochloride for the prevention of postoperative atrial fibrillation in patients undergoing oesophagectomy: a pilot trial sequential analysis of randomised trials for hypothesis synthesis.

BASO~ACS

2020 BASO Annual (virtual) Meeting
21st – 23rd Nov

Aims:

Postoperative atrial fibrillation (AF) after oesophagectomy is associated with pulmonary and anastomotic complications. Landiolol hydrochloride is an ultrashort-acting β1-selective blocker that may prevent AF via its anti-inflammatory and β1-adrenergic blockade effects. We aimed to perform a pilot systematic review, meta-analysis and trial sequential analysis of randomised trials to assess the level of current evidence for hypothesis synthesis.

Methods:

We conducted a search of electronic information sources, including MEDLINE; EMBASE; CINAHL; the Cochrane Central Register of Controlled Trials (CENTRAL); the World Health Organization International Clinical Trials Registry; ClinicalTrials.gov; and ISRCTN Register, and bibliographic reference lists to identify all randomised controlled trials (RCTs) comparing landiolol with placebo in patients aged >18 with pathologically confirmed oesophageal carcinoma undergoing planned transthoracic oesophagectomy. Fixed-effect model was applied to calculate pooled outcome data. Trial sequential analysis was performed to assess the possibility of type I or II error and compute the information size required for conclusive meta-analysis.

Results:

We identified two placebo-controlled randomised trials, enrolling a total of 139 patients. The included population were comparable in terms of age [67 vs 66, mean difference (MD): 1.32, 95% confidence interval (CI): -1.89, 4.53, P= 0.42], gender [male: 73% vs 84%, odds ratio (OR): 0.53, 95% CI, 0.23, 1.23, P= 0.14], hypertension (40% vs 45%, OR: 0.81, 95% CI: 0.41, 1.58. P=0.53), diabetes mellitus (40% vs 45%, OR: 1.28, 95% CI: 0.49, 3.33. P=0.61), intraoperative blood loss (364 ml vs 391 ml, MD: 42.21 95% CI: -9.56, 93.97, P=0.11), and operative time (498min vs 504min, MD: -12.46, 95% CI: -36.57, 11.65, P=0.31). The risk of postoperative AF was lower in landiolol group compared to placebo (9% vs 31%, OR: 0.21, 95% CI: 0.08, 0.55. P=0.002). The landiolol reduced postoperative heart rate significantly compared with placebo (MD: -11.00, 95% CI: -17.39, -4.61, P=0.0007) without any adverse effect on systolic (MD: -1.68, 95% CI: -8.17, 4.81, P=0.61) and diastolic blood pressure (MD: -1.87, 95% CI -4.74, 1.00, P=0.20). A low level of heterogeneity among the studies existed (I2=0%, P=0.46). The information size was calculated at 156 patients and trial sequential analysis showed that the risk of type 1 error was minimal.

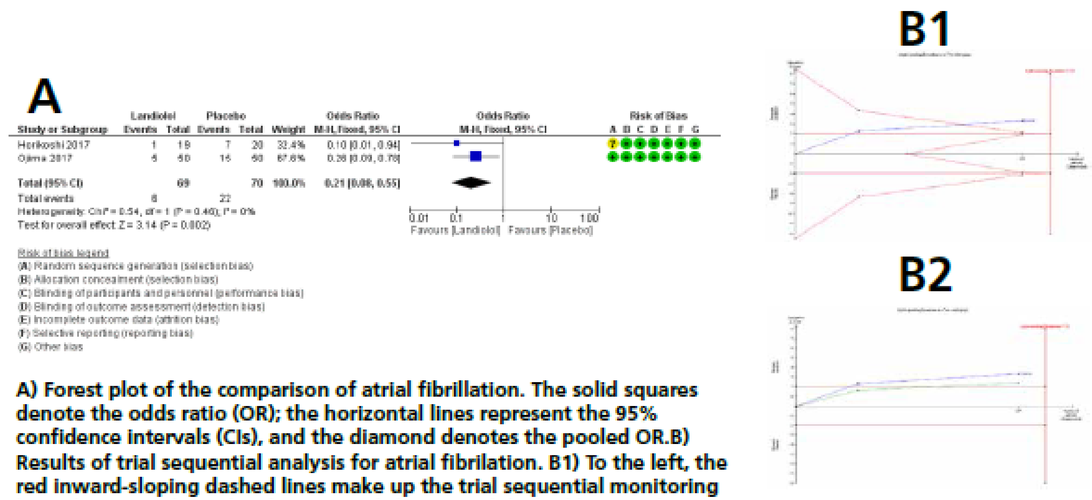
Table 1. Baseline characteristics of the included studies

First author	Journal	Country	Design	Population	Exclusion criteria	Landiolol regimen	Control treatment	Detection of arrhythmias
Horikoshi 2017	Journal of Clinical Anesthesia	Japan	RCT	Patients undergoing oesophagectomy for oesophageal cancer	• History of cardiac (e.g., arrhythmias including AF, conduction abnormalities) • Antiarrhythmic medications including-blockers • Recent angina pectoris or myocardial infarction) • Pulmonary, or renal disease • Thyroid dysfunction	5 μg/kg/min for 24 hours	0.9% saline solution as placebo	ECG during anaesthesia and the ICU stay
Ojima 2017	British Journal of Surgery	Japan	RCT	Patients undergoing oesophagectomy for oesophageal cancer	• Need for dopamine • Systolic blood pressure < 80 mmHg or >160mmHg • Heart rate <50 beats per min • Arrhythmias • Need for ventilator assistance	3 μg/kg/min for 72 hours	5% glucose solution as placebo	ECG during anaesthesia and the ICU stay

Table 2. Baseline characteristics of the included population

Baseline variable§	Landiolol	Placebo	Summary measure*	P value$
Age	67 (10)	66(8)	1.32 [-1.89, 4.53]	0.42
Male	51/69	59/70	0.53 [0.23, 1.23]	0.14
Female	18/69	11/70	1.89 [0.82, 4.39]	0.14
Hypertension	28/69	32/70	0.81 [0.41, 1.58]	0.53
Diabetes mellitus	11/69	9/70	1.28 [0.49, 3.33]	0.61
Operative time, min	498 (75)	504 (81)	-12.46 [-36.57, 11.65]	0.31
Blood loss, ml	364 (319)	391 (395)	42.21 [-9.56, 93.97]	0.11

* Odds ratio (OR) for dichotomous variables and mean difference for continuous variables
$ 95% confidence level
§ Mean (SD) for continuous variables and proportions for dichotomous variables



Risk of bias legend
(A) Random sequence generation (selection bias)
(B) Allocation concealment (selection bias)
(C) Blinding of participants and personnel (performance bias)
(D) Blinding of outcome assessment (detection bias)
(E) Incomplete outcome data (attrition bias)
(F) Selective reporting (reporting bias)
(G) Other bias

A) Forest plot of the comparison of atrial fibrillation. The solid squares denote the odds ratio (OR); the horizontal lines represent the 95% confidence intervals (CIs), and the diamond denotes the pooled OR.B) Results of trial sequential analysis for atrial fibrilation. B1) To the left, the red inward-sloping dashed lines make up the trial sequential monitoring boundaries. To the right, the outward sloping red dashed lines make up the futility region. The solid blue line is the cumulative Z curve. B2) The solid green line presents penalised Z value.

Conclusions:

The best available evidence suggests that landiolol hydrochloride is promising in prevention of postoperative AF in patients undergoing oesophagectomy. The available evidence is restricted to a very limited number of RCTs. There is currently no ongoing trial investigating effect of landiolol in postoperative AF following oesophagectomy. This review warrants a need for designing more RCTs and our results can be used as a robust pilot for generation of hypothesis in future trials.

Presented by: Jigar shah Authors: Jigar Shah, Paul Peters, Shahab Hajibandeh.
North Manchester General Hospital

Poster 113. Outcomes Following Addition Of Pain Team Member To Thoracic Multi-Disciplinary Team Morning Ward Round

M Smith[1], S Mason[2], D Duvva[1], R Devonshire[1], H McCormack[1], A Bhawnani[1], D Mayhew[1], M Shackcloth[1]

[1]Liverpool Heart and Chest Hospital, [2]University of Liverpool

BASO~ACS

2020 BASO Annual (virtual) Meeting

21st – 23rd Nov

Background

- Post-operative analgesia post thoracic surgery is challenging despite the widespread adoption of minimally-invasive surgery[1]
- The WHO pain ladder, whilst designed for treatment of cancer pain, provides a useful framework for the incremental addition of analgesics in order to achieve comfort[2]
- A system of multimodality and side-effect minimisation is desirable in acute post-operative pain
- Our local acute pain protocol is provided in Figure 1.

Methods and Materials

- We performed detailed retrospective analysis of all thoracic cases in the month prior to the change in practice in April 2018 and for same period 12 months later
- This included case mix, patient characteristics, pre-operative analgesia use and post-operative analgesia use
- Opiate prescriptions on discharge for our thoracic patients were analysed from January 2018 to September 2019

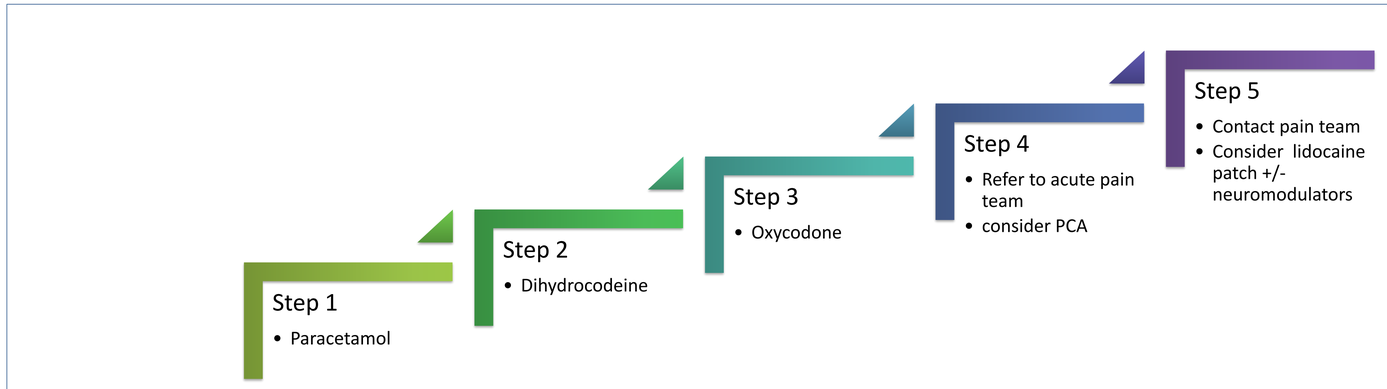


Figure 1. Liverpool Heart and Chest Hospital Acute Pain Protocol.

Month	2018	2019	
April	15	10	
May	19	2	
June	9	6	
July	6	3	
August	9	4	
September	4	6	
Mean (SD)	10.33 (5.64)	5.17 (2.89)	p=0.037

Table 1. Number of patients discharged on both quick and modified release oxycodone.

Discussion

- The advent of our new more integrated approach of having a member of the pain team on our morning rounds coincided with a reduction in strong opiate prescriptions as an inpatient and on discharge
- The process led to more rationalized decision making and discharge planning of analgesia at the start of the working day
- Whilst clearly multi-factorial, these changes contributed to positive outcomes and other units may wish to consider performing routine ward rounds with a pain specialist

Objectives

- We anecdotally suspected we could improved our adherance to our analgesia protocol and there had been an increase in patients being discharged on strong oral opiates
- In April 2018 we introduced a routine pain team presence on our morning multi disciplinary team thoracic ward round
- We reviewed this change in practice with an emphasis on patients strong opiate usage (step 3 of our protocol)

Results

- We observed a reduction in patients taking both normal and modified-release oxycodone from 21 to 8 in March 2018 and 2019 respectively.
- This was despite similar patient characteristics, case mix and pre-operative analgesia use.
- Over a 6 month period in 2018 compared to 2019 we observed significant reduction in the percentage of patients being discharge on strong opiates (Table 1).

Conclusions

Pain team presence on our thoracic MDT ward round was well received with positive staff and patient feedback.

Whilst multi-factorial, we observed a statistical significant decrease in strong opiate usage on discharge and a more coordinated strategy to post-operative analgesia.

This has prompted further study into these outcomes and we are currently collecting patient reported pain scores

Contact

Matthew Smith
Specialty Trainee Cardiothoracic Surgery
Email: Matthew.Smith@LHCH.nhs.uk

References

1. Timothy J P Batchelor, Neil J Rasburn, Etienne Abdelnour-Berchtold, Alessandro Brunelli, Robert J Cerfolio, Michel Gonzalez, Olle Ljungqvist, René H Petersen, Wanda M Popescu, Peter D Slinger, Babu Naidu, Guidelines for enhanced recovery after lung surgery: recommendations of the Enhanced Recovery After Surgery (ERAS®) Society and the European Society of Thoracic Surgeons (ESTS), *European Journal of Cardio-Thoracic Surgery*, Volume 55, Issue 1, January 2019, Pages 91–115

2. Ventafridda V, Saita L, Ripamonti C, De Conno F. WHO guidelines for the use of analgesics in cancer pain. Int J Tissue React. 1985;7(1):93-6. PMID: 2409039

Poster 115: Semi-structured healthcare professional interviews to explore their preferences for the assessment and optimization of older adults facing major gastrointestinal surgery

Sarah L Daniels[1,2], Matthew J Lee[1,2], Maria Burton[3], Susan Moug[4,5], Tim Wilson[2,6], Steve Brown[1,2], Lynda Wyld[2,6].
1. Sheffield Teaching hospitals NHS FT, 2. University of Sheffield, 3. Sheffield Hallam University, 4. Royal Alexandra Hospital, 5. University of Glasgow, 6. Doncaster and Bassetlaw NHS FT

BASO~ACS

2020 BASO Annual (virtual) Meeting
21st – 23rd Nov

Introduction

The health status of older adults varies considerably, meaning that determining best practice in this group is complicated and treatment requires tailoring to individual patients, not their chronological age(1). Lack of clear evidence-based guidelines for the assessment of suitability ("fitness") for major GI surgery contributes to practice variation(2).

Adequate assessment of fitness and frailty and subsequent targeted peri-operative interventions to enhance resilience is often lacking(3). There is little published data on how healthcare professionals determine suitability for major gastrointestinal surgery and how they optimize them to improve outcomes(4). Understanding how clinicians make decisions and the value they place and availability of different optimisation strategies may help to understand variation in practice.

Clinician opinion factors heavily on patient decision-making and may form a substantial aspect of practice variance(5). The causes of this varying opinion are not known but may include personal experience, interpretation of the literature or unit protocols.

Objectives

This study aimed to explore the practices and attitudes of a wide range of healthcare professionals involved in the referral, assessment, optimization and rehabilitation of older patients undergoing major GI surgery to delineate barriers and facilitators to improving care.

Methods

Semi-structured qualitative interviews were undertaken with a range of healthcare professionals involved in the treatment, assessment and optimisation of gastrointestinal surgery patients across the South Yorkshire region. Ethical approval was granted by the Health Research Authority (ref: 19/HRA/5964) and local Research and Development approvals were obtained at individual NHS Trusts. Written informed consent was obtained prior to commencement of the interviews. Interviews were digitally recorded, transcribed verbatim and analysed for themes according to the Framework approach.

Healthcare professionals were selected across the spectrum of pre-, peri- and post-operative care, including Primary Care. Participants were selected to include at least one surgeon and one other healthcare professional from each unit. Participants had to be regularly involved in the care of patients undergoing major gastrointestinal surgery.

Interviews were conducted with reference to a pre-prepared interview schedule.

Results

Thirty-seven healthcare professionals (9 surgeons, 8 specialist nurses, 7 anaesthetists, 5 allied health professionals, 3 oncologists, 3 General Practitioners and 1 geriatrician) were interviewed across 5 hospitals in the South Yorkshire region.

Interviews lasted between 13 and 63 minutes, mean 30 minutes. 16/37 (43%) of participants were male. Three themes were developed with several sub-themes developed during interview analysis (Table 1).

Thematic analysis

Experience of assessment of suitability for major surgery

There was variation between clinicians, subspecialties and units in how patients are currently assessed, with variable provision of cardiopulmonary exercise testing, frailty and nutritional assessment. Opinion varied on whose responsibility it is to assess fitness for surgery and how decisions regarding fitness are made in the cancer MDTs.

"The vast majority of patients who we think there's a realistic possibility of surgery have cardiopulmonary exercise testing …. That is then fed back into our weekly MDT meeting" Colorectal Surgeon

"PS is used for all patients. Whilst it is quite subjective we know that people with a poor PS will have a shorter life expectancy with chemotherapy than without" HPB Oncologist

'The MDT cannot generally make a decision about patient fitness because you do not have all the information needed in the first place" Colorectal surgeon

Commonly discussed barriers to adequate assessment included availability of relevant HCPs and time in their job plans, lack of interventions when deficits are identified and lack of routine screening.

"NICE guidance suggests that all outpatients are screened [for malnutrition] but that doesn't happen in this hospital just for capacity issues I suppose really." Dietician

"The reason we haven't done it up until now is because there's no point doing a frailty assessment if you're not going to do anything about it…" Anaesthetist

Experience in optimizing older patients for major surgery

Many clinicians spoke of their efforts to improve patient pathways and the value they place in prehabilitation and optimization strategies.

"Sometimes prehabilitation is a measure of their commitment to get themselves better" Colorectal surgeon

""[Surgery School aims] to educate them on the things that they can actually change for themselves" Anaesthetist

Common barriers to optimisation included time within the existing cancer pathways, restrictive job plans of ACPs and having to make business cases for service improvements. Lack of evidence-based guidelines and evidence of clear benefit were cited as barriers to securing funding for prehabilitation programmes. Optimisation of patients presenting as emergencies is seen as particularly challenging and requires co-ordination of care.

"We currently have really poor access to dieticians, not because of dieticians, just because they're too busy" HPB Oncologist

Decision-making in older patients

HCPs emphasized the importance of involving the patient and their family in discussions regarding treatment, particularly where there are concerns regarding poor outcomes after surgery. Many spoke about the effect of major surgery on functional abilities and that this will influence patient decision-making. Many spoke of the importance of symptom burden in older patients and that often they will accept higher risk if their symptom burden is high.

"To live longer you have to trade something and that something is often your quality of life" Anaesthetist

Theme 1: Experience of assessment of suitability for major GI surgery in older adults	
Subthemes:	Examples
Usual practice in the elective setting	Use of CPET, self-completion questionnaires
Usual practice in the emergency setting	Frailty assessment, NELA scoring, functional ability
Barriers to assessment	Time within the cancer pathway, job plans
Facilitators to assessment	Redesigning pathways to put fitness assessment first
Attitudes towards high risk patients	Symptom burden, trade-offs, alternatives
Theme 2: Experience in optimising older patients for major GI surgery	
Subthemes:	
Usual practice	
• **Physical activity**	Advice given but limited access to prehabilitation programmes
• **Nutritional**	Limited access to dietician support, value of advice
• **Psychological**	Role of CNSs, access to psychologists
• **Co-existing medical conditions**	Role of protocols and guidelines
• **Lifestyle**	Own practice regarding smoking cessation
• **Geriatric**	Access to geriatricians, role in emergency patients
• **Peri-operative**	ERAS, laparoscopic procedures
• **Rehabilitation**	Role of allied health professionals, time in job plans
Barriers to optimisation	Constraints of the cancer timelines, emergency care disorganised and difficult to optimise
Facilitators to optimisation	Allied health professional input into cancer MDTs, co-ordinated post-operative care for emergency patients
Theme 3: Decision-making in older patients	
Subtheme:	
Impact of age on treatment decisions	Fitness, function & frailty more important than age
Potential treatment trade-offs for high-risk patients	Symptom burden important determinant
Factors influencing decision-making	Role of allied health professional input, engagement
Challenges in emergency GI surgery	Time, physiology
Supporting patients to make decisions	Taking time for decisions, repeated discussions

Table 1. Themes and subthemes developed during analysis.

Discussion

This study demonstrates wide variation across a region in how patients are currently assessed and optimized for major GI surgery. Hospitals with Cardiopulmonary Exercise Testing services were more likely to be developing prehabilitation services and making efforts to re-design pathways to enable time for optimization. Many HCPs spoke of the need for geriatrician input into the management of high-risk or frail older individuals, particularly those presenting as emergencies, however lack of geriatricians in their hospitals prevented this. Geriatrician-led multidisciplinary input was viewed as important in co-ordinating post-operative allied health professional input, managing medical co-morbidities and facilitating discharge preparations.

Patients with benign disease and those presenting as emergencies often have higher levels of co-morbidity, dependency and frailty, but historically the care of these patients has not received adequate funding or attention in National audits.

Conclusions

Lack of evidence-based guidelines prevents the development of services and pathways. Difference in opinion between healthcare professionals regarding assessment and optimisation may account for some of the variation in gastrointestinal surgery outcomes observed in the UK.

Contact

Sarah Daniels
Sheffield Teaching Hospitals NHS Foundation Trust
Email: sarahdaniels1@nhs.net
Phone: 07941605424

BOWEL RESEARCH UK.

The University Of Sheffield.

References

1. Turrentine FE, Wang H, Simpson VB, Jones RS. Surgical Risk Factors, Morbidity, and Mortality in Elderly Patients. J Am Coll Surg 2006. doi:10.1016/j.jamcollsurg.2006.08.026.
2. The Royal College of Surgeons of England., Royal College of Surgeons. Access all ages. Rcs 2013.
3. Grocott MPW, Plumb JOM, Edwards M, Fecher-Jones I, Levett DZH. Re-designing the pathway to surgery: better care and added value. Perioper Med 2017. doi:10.1186/s13741-017-0065-4.
4. Szatmary P, Arora S, Sevdalis N. To operate or not to operate? A multi-method analysis of decision-making in emergency surgery. Am J Surg 2010. doi:10.1016/j.amjsurg.2009.10.020.
5. Morgan JL, George J, Holmes G, Martin C, Reed MWR, Ward S, et al. Breast cancer surgery in older women: outcomes of the Bridging Age Gap in Breast Cancer study. Br J Surg 2020. doi:10.1002/bjs.11617.

Poster 120: A study demonstrating the accuracy of a new triage system for breast cancer referrals during the Covid-19 pandemic in a tertiary hospital.

Goh N-M; Simonca C; Verroiotou M; Jenkins S.
University Hospitals Plymouth NHS Trust

BASO~ACS
2020 BASO Annual (virtual) Meeting
21st – 23rd Nov

Introduction / Background

The Covid-19 pandemic has led to a need for alternative methods of doctor-patient communication. Traditionally urgent or "2 week wait" referrals were booked directly into a manned clinic. During the pandemic however, most healthcare providers have utilised telecommunication to minimise face-to-face contact whilst continuing to provide essential services. At our institution, patients are being triaged by consultant breast surgeons to clinic or phone/video consultation on the basis of the referral letter. This triage system has gradually changed as the pandemic situation stabilised, with more emphasis placed on patient risk factors.

Objectives

This study aimed to assess the accuracy of this new triage process as it evolved at our hospital.

Methods and Materials

Data was collected prospectively from March 17th to June 30th 2020. This period of just over 3 months allowed an evaluation of the system to ensure it was valid and worth continuing. All breast patient referrals, having been triaged to either one-stop clinic, phone consultation or video consultation at Derriford Hospital, United Kingdom, were analysed. Electronic records were examined for clinic outcomes and histopathology results.

Results

871 referrals were received and analysed. 588 (67.5%) of referrals were triaged to phone consultation; 270 (31%) were triaged to one-stop clinic; 12 (1.4%) were triaged to video consultation; and 1 (0.1%) was reviewed as an inpatient. 64 (7.3%) cancers were confirmed on histopathology.

In March, 6 out of 8 cancers were triaged to clinic initially (75% sensitivity) with 44 out of 80 benign cases being triaged to phone consultation (55% specificity). 6 out of 42 patients with clinic appointments were diagnosed with cancer (14.3% positive predictive value [PPV]) and 44 out of 46 of phone consultations were benign (95.7% negative predictive value [NPV]).

In April, 16 out of 21 cancers were triaged to clinic (76.2% sensitivity) and 148 out of 178 benign cases were triaged to phone consultation (83.1% specificity). PPV was 34.8% and NPV 96.7%.

In May, 10 out of 13 cancers were triaged to clinic (76.9% sensitivity) and 163 out of 239 benign cases were triaged to phone consultation (68.2% specificity). PPV was 11.6% and NPV 98.2%.

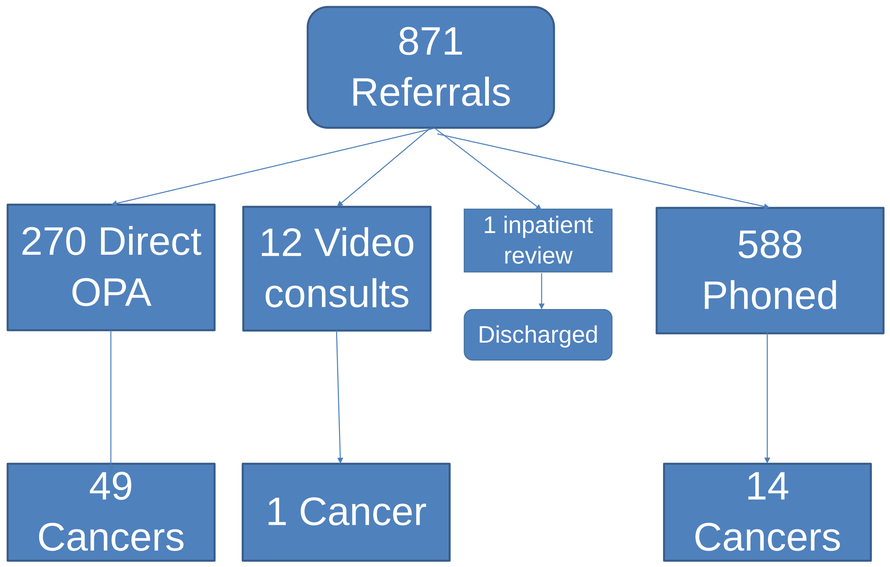
In June, 17 out of 22 cancers were triaged to clinic (77.3% sensitivity) and 230 out of 309 benign cases were triaged to phone or video consultation (74.4% specificity). PPV was 17.7% and NPV 97.9%.

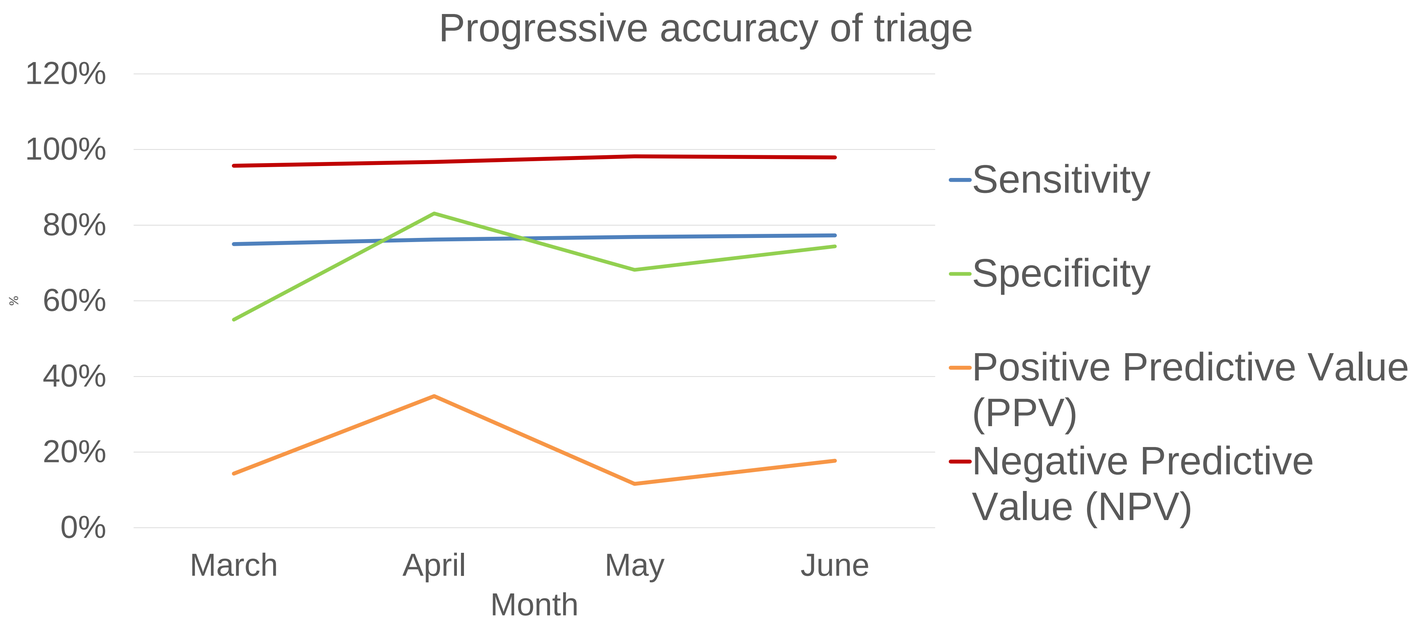
Discussion

Whilst there is some variability in cancer numbers from month-to-month resulting in PPV fluctuation, sensitivity and NPV remain stable and improving, likely due to increased experience with triaging referrals with regards to the available resources and actual impact of Covid-19 locally. The initial expectation of a severe impact to services led to caution inviting more elderly or co-morbid patients to clinic, which has subsequently been less necessary as the situation stabilised.

Conclusions

This study demonstrates an improvement in the accuracy of the triage system as the process evolved. Despite switching to alternative forms of communication, there is ongoing and timely diagnosis of breast cancer from referrals. As such, given the long term and continuing implications of Covid-19 and the subsequent desire to keep hospital foot-fall as low as feasible, telephone and video consultation will continue to be utilised. Further analysis of the cost-effectiveness of this process will need to be performed however to ensure resources are allocated appropriately.





Contact

Ngee-Ming Goh
University Hospitals Plymouth NHS Trust
Email: ngee-ming.goh@nhs.net
Phone: 07815 470377

NHS
University Hospitals Plymouth
NHS Trust

Poster 121: Emergency Robotic Colorectal surgery – the new frontier; a case series study

Authors: Qiang Lu 1, Siddharth Jain 1, 2, Charlotte Parfitt 1, Samuel Stefan 1, Jim Khan 1,3
1 - Colorectal Department, Portsmouth Hospitals University NHS Trust, UK
2 - Medical student, University of Southampton, UK
3 - Associate Professor, Anglia Ruskin University, Cambridge, UK

2020 BASO Annual (virtual) Meeting
21st – 23rd Nov

Introduction:

Robotic colorectal surgery is rapidly evolving as it addresses many of the technical and ergonomic limitations of laparoscopic surgery. The precision of robotic surgery results in smaller incisions, shortened hospital stay, less postoperative pain, and a much quicker return to normal, thus significantly improving patient experience. However the application of robotic surgery in the emergency setting remains very limited due to the logistical and organisational challenges and reluctance in adoption by the clinical teams. The aim of this study was to report the outcomes and early experience of emergency robotic colorectal surgery.

Method:

All consecutive patients having emergency robotic colorectal surgery at our institution over a 12 month period (October 2019 to September 2020) were recruited in this study. Data were collected from the electronic patient records.

Fig. 1: intraoperative views of vascular structures
1 Emergency robotic CME procedure

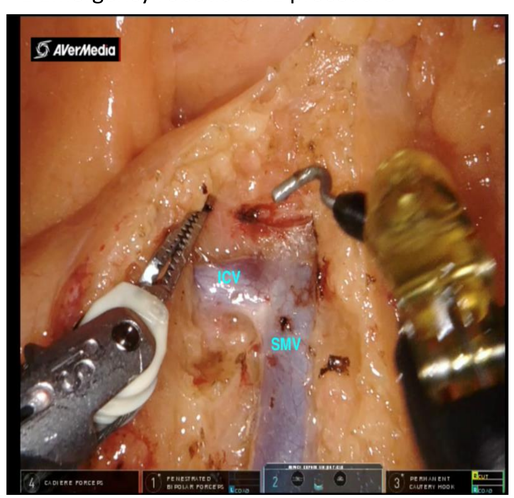
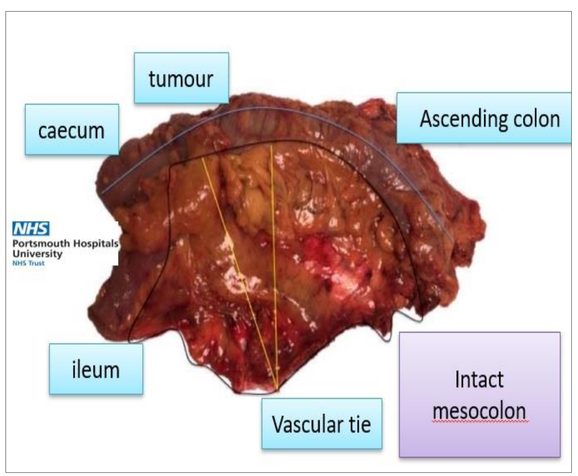


Fig.2: Quality assessment of the CME surgical specimen (labelling and description)



Results:

Five patients were included in the case series.

Demographics:
- Median age: 68.8 years (36-83).
- 3 female and 2 male patients .
- Median BMI was 27.1 (range 19-41).
- All were admitted with acute abdomen.

Operations:
- 3 emergency robotic right hemicolectomy, with complete mesocolic excision for obstructing right sided colon cancer.
- 1 robotic anterior resection of colo-vesical fistula secondary to diverticular disease with a pelvic abscess.
- 1 robotic subtotal colectomy for acute toxic colitis with failure of medical therapy/

Outcomes:
- All cancer patients had R0 resection.
- Median lymph node count was 48
- Median operating time was 212 min (range 120-350 min)
- There were no grade III/IV complications and no 90-day mortality.
- 1 patient developed surgical site infection treated with antibiotics.

Conclusion:

Our case series highlighted that robotic colorectal surgery could achieve favourable outcome in emergency patients with acceptable operating times. Well led clinical teams with appropriate training can offer the benefits of robotic surgery to this challenging group of patients.

NHS Portsmouth Hospitals University NHS Trust

PORTSMOUTH COLORECTAL