Posters for BASO Trainees and BASO Poster Presentations (Part – 1)

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• Start with Abstract Number and Title in the email.
• Add your question/s for the author.

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Introduction

Plasma cell neoplasms are a group of proliferative disorders which can either present as solitary plasmacytoma or multiple myeloma (MM). MM affecting the laryngeal cartilage is rare. A literature review of 16 cases reported that 81% of EMP presents as a manifestation of MM, 19% as localised EMP (2). In this case report, we discuss a rare case of extramaryllary recurrence of multiple myeloma involving the larynx.

Objectives

Presentation
A 69-year-old male ex-smoker presented with a 7-week history of stridor, right-sided globus, productive cough, dysphagia, odynophagia and aspiration. He had received local radiotherapy and was undergoing chemotherapy for IgG kappa multiple myeloma with T12 plasmacytoma.

Investigations
Flexible nasendoscopy (FNE): generalised laryngeal oedema in a mobile larynx. MRI neck with gadolinium: post-cricoid soft tissue enhancement with normal cartilage, suggestive of an inflammatory lesion with extensive surrounding oedema (Figure 1).

Differential diagnosis
Laryngeal malignancy or lower respiratory tract infection secondary to chemotherapy.

Second presentation
Over 2 weeks later, stridor progressed requiring emergency intubation.

Investigations
FNE: bilateral vocal cord palsy and pus in the vallecula. CT neck with contrast: subglottic tissue oedema; with no evidence of a collection or erosion. There were presumed reactive lymph nodes in the cervical region. MRI neck with contrast: progression and extension of the post-cricoid lesion, suggestive of infection. Biopsy: Multiple biopsies of the post-cricoid space revealed chronic inflammation with no signs of malignancy.

Differential diagnosis
Plasmacytoma or abscess leading to chondronecrosis of the larynx.

Management
Daratumumab monotherapy, followed by total laryngectomy eight months later for incompeptent larynx.

Immunohistochemistry
Kappa light chain restriction within plasma cells in the hyoid bone and laryngeal soft tissue, consistent with myeloma infiltration (Figure 2).

Follow up
A year later the patient has achieved speech with an oesophageal speech valve and is on a normal diet. He maintains biochemical response to pomalidomide and dexamethasone.

Discussion

Challenges in diagnostic workup
This challenging case reflects how important a comprehensive workup is. Typical findings of CT scans of MM by larynx include calcifications and infiltrative growth of cartilaginous cartilage (2,3). Position emission tomography (PET) scan can be used to detect lesions (2). However, it would also detect inflammation caused by infection, which was the most probable differential diagnosis at that time.

Malignancy was not confirmed until immunohistochemistry staining of laryngeal specimen had been performed. It was postulated that deep biopsies from cartilage or bones would be better at detecting malignant cells, as in-office FNE biopsies target the mucosal layer and 80% of EMPs are submucousal (4). FNE biopsies in this patient were done post-chemotherapy, which may have obscured the pathology further. The extent of the lesion prior to any treatment is unclear.

Management
The common localised treatment methods for extramaryllary plasmacytoma include surgical excision with combination of radiotherapy (2,4-6). Systemic treatment with chemotherapy is useful in the setting of multiple myeloma, with stem cell transplantation as an alternative therapy (3,4,7). This patient was suitable for a laryngectomy due to dysfunctional larynx. One could argue that radiotherapy targeted at the larynx could have prevented vocal cord palsy and later a laryngectomy. However, the diagnosis was not confirmed until immunohistochemistry was performed on laryngeal specimens. Furthermore, once the larynx was dysfunctional, radiotherapy would not have been beneficial.

Conclusions

Extramaryllary involvement of multiple myeloma in the larynx is a challenging diagnosis and prompts thorough investigation with a range of modalities if suspected. Deep biopsies of the larynx should always be considered. The potential benefit of a PET scan would not be missed. Chemotherapy should be commenced at an early stage to prevent further progression and remission of multiple myeloma at an extramaryllary site.

Acknowledgements

I would like to thank Dr Ketan Shah and Dr Karthik Ramasamy for their contributions and support. I would also like to thank Dr Stephen Damato for the histological images.

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References

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The ages of the 120 patients who underwent colonoscopy ranged between 46 and 90 years (standard deviation, SD, 70) (Table 1). All colonoscopies were reported as sigmoid diverticular disease with no major new findings differing from the CT results. However, eight patients were reported with inflammation in addition to diverticular disease. Another 4 patients had mucosal ulcers, 12 patients had low-risk polyps and 5 patients had muscle hypertrophy of the colonic wall having no complications during the procedure, while nine colonoscopies were reported as being difficult procedures, with or without looping. During the procedure, moderate to severe discomfort, with or without pain, was reported by 18 patients, which led to early termination of the procedure in 5 cases. Some 112 patients had the procedure under a variable degree of sedation and/or analgesia. During colonoscopy, polyp bowel preparation was reported in seven procedures with poor visualisation in eight cases. Biopsies were obtained from 32 patients. A histopathological revelation revealed no dysplasia or malignancy, although eight were reported to have adenoma (Table 2). The average length of the procedure was 40 minutes. The second 120 patients underwent flexible sigmoidoscopy. Their ages ranged between 28 and 91 years (SD 72 ± 13.9) and 63% were female. All flexible sigmoidoscopies were reported as sigmoid diverticular disease with no major new findings differing from the CT results. However, 10 patients were reported with inflammation in addition to diverticular disease, another 4 with mucosal ulcerations, 8 with low-risk polyps and 2 with muscle hypertrophy of the colonic wall (Table 1). All flexible sigmoidoscopies were reported as having no complications during the procedure, while three flexible sigmoidoscopies were reported as being difficult procedures. During the flexible sigmoidoscopies, moderate to severe discomfort with or without pain was reported by 16 patients, which led to early termination of the procedure in three cases. Sixteen patients had the procedure performed under a variable degree of sedation and/or analgesia. During the flexible sigmoidoscopy, polyp bowel preparation was reported in 26 patients with poor visualisation in 16. Biopsies were obtained from 21 patients and their histopathological examination showed no dysplasia or malignancy, although 4 were reported with adenoma (Table 2). The average length of the procedure was 15 minutes.

Table 1. Summary of endoscopic findings by colonoscopy and flexible sigmoidoscopy.

<table>
<thead>
<tr>
<th>Finding with diverticular disease</th>
<th>Colonoscopy (n)</th>
<th>Flexible sigmoidoscopy (n)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inflammation</td>
<td>8</td>
<td>14</td>
</tr>
<tr>
<td>Mucosal ulceration</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Muscle hypertrophy</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Polyp</td>
<td>12</td>
<td>8</td>
</tr>
<tr>
<td>Normal</td>
<td>91</td>
<td>5</td>
</tr>
<tr>
<td>Total patients</td>
<td>120</td>
<td>120</td>
</tr>
</tbody>
</table>

Methods and Materials

A retrospective study was designed with 327 patients who were diagnosed with acute diverticulitis, based on their hospital electronic discharge notification, after admission to Maidstone and Tunbridge Wells NHS Trust. The selected patients were organised into two equal groups: one group included 120 patients who underwent colonoscopy and the other included 120 patients who underwent flexible sigmoidoscopy. The CT results were reviewed using the hospital picture archiving and communication system. All CT scans were originally reported by consultant radiologists. The endoscopic results were also reviewed on the hospital’s online endoscopy website system (Endoweb). All endoscopies were performed and reported by fully trained endoscopists. A Lucera-type colonoscope (Olympus, Japan) was used in both colonoscopy and flexible sigmoidoscopy. Biopsies were obtained from 53 patients (32 during colonoscopy and 21 during flexible sigmoidoscopy) and the histopathology reports were reviewed on Maidstone and Tunbridge Wells NHS Trust Telepath website.

Results

• The prevalence of diverticular disease has been increasing in the Western world over the past few decades. While previously considered as a disease primarily affecting the elderly, the incidence among younger people is rising. The burden of diverticular disease on the healthcare system has increased with more hospital admissions and investigations required.

• Diverticulitis can be simple (uncomplicated) or complicated by bleeding, perforation, abscess or bowel obstruction. Diagnosis is usually confirmed by computed tomography (CT). In patients with complicated diverticulitis or those with concerning findings on CT, endoscopic follow-up is recommended after resolution of the acute episode to exclude any neoplasm or other colonic disease such as inflammatory bowel disease, which can mimic the symptoms of diverticulitis.

• Evaluation of the whole colon can be achieved using colonoscopy, while flexible sigmoidoscopy can only access the left side of the colon. The colonoscopy compared with flexible sigmoidoscopy is a time-consuming and relatively expensive procedure with a higher chance of serious complications, and requires full bowel preparation, which can be challenging in some patients with other comorbidities.

Discussion

• There are many conflicts between studies on the benefits of performing endoscopy after a diagnosis with diverticulitis, with many reviewed studies drawing the conclusion that endoscopy can be omitted after an episode of uncomplicated diverticulitis. However, it can be beneficial in cases of complicated diverticulitis or continuing symptoms, and in patients aged over 70 years, because the risk of malignancy in these patients is higher. In contrast, the Association of Coloproctology of Great Britain and Ireland (ACPGIB) has recommended that all patients require investigation of the colon lumen by endoscopy, barium enema or CT colonography after the acute attack of diverticulitis has resolved.

• Both screening colonoscopy and flexible sigmoidoscopy were associated with reductions in overall colorectal cancer incidence, with greater reductions in incidence associated with colonoscopy rather than flexible sigmoidoscopy, particularly in the right colon. All patients included in the current study were diagnosed with left-sided diverticulitis. Although the number of patients included in this study was relatively small, it shows interesting findings of clinical significance.

• The recent consensus guidelines jointly commissioned by the British Society of Gastroenterology, the ACPGIB and Public Health England recommended no colonoscopic surveillance post-polyectomy if there is no evidence to suggest high-risk findings (≥ 2 premalignant polyps including ≥ 1 advanced colorectal polyp, or ≥ 5 premalignant polyps). In our study, polyps detected were of low risk and biopsies confirmed no malignancy, so all patients were discharged with no follow-up required.

Conclusions

There is no evidence to support the routine use of endoscopic evaluation after an episode of left-sided diverticulitis diagnosed on CT if no new or worrying findings have been reported. This study supports similar findings from other recent studies and therefore we disagree with the Royal College of Surgeons of England (ACPGIB recommendation) commissioning guide, which advocates routine surveillance of the colon.
Poster 14: Cost Analysis Comparison of Mohs Micrographic Surgery in the United States of America and United Kingdom

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University of Liverpool

Introduction:
Mohs Micrographic Surgery (MMS) is globally acknowledged as the gold standard for treatment of recurrent, infiltrative, large and aggressive non-melanoma skin cancers (NMSC). It achieves maximal tissue preservation, less scarring and deformity and a low recurrence rate. The United States of America (USA) is one of the advanced countries where it is widely used and has been found to be cost effective compared to the conventional excision.

Method:
A search through Pubmed, Medline, UpToDate, Embase, Google scholar and Cochrane library was performed on MMS in the USA and UK. The articles found were reviewed and analysed.

Results:
MMS has shown to be cost-effective in both countries as it reduces the need for elaborate surgeries due to its preservation of healthy tissues. It has however lesser burden on the USA healthcare system as most of the defects are left to heal by secondary intention compared to UK (table 1).

<table>
<thead>
<tr>
<th>Types of Repair</th>
<th>USA</th>
<th>UK</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heal by secondary intention</td>
<td>37.9%</td>
<td>0.80%</td>
</tr>
<tr>
<td>Closed primarily by intermediate linear or complex closure</td>
<td>37.5%</td>
<td>58.5%</td>
</tr>
<tr>
<td>Flaps</td>
<td>13.8%</td>
<td>18.5%</td>
</tr>
<tr>
<td>Grafts</td>
<td>8.9%</td>
<td>22.1%</td>
</tr>
</tbody>
</table>

Table 1: Percentage of soft tissue cover post MMS in the USA and UK.

Discussion:
The USA and UK both have increase of incidence rate of NMSC of more than 50% in the last few years. The indications of MMS are broadly similar however in the USA, it is not only restricted to NMSC but for other cutaneous neoplasm as well such as Dermatofibrosarcoma Protuberosans and Keratoacanthoma among many. While in the UK due to the financial constraints of the NHS it is mainly implemented for treatment of MMSC and on specific patients.

The procedure is performed in the same standardised manner in both places. This also apply for the referral pathways where primary (GP) and secondary physicians (Dermatologists or Plastic Surgeons) have a role to play.

Conclusion:
MMS can be a potential source of cost saving to the NHS as it has proven to be cost-effective. Further cost-savings can be achieved by reducing the amount of soft tissue reconstruction as in the USA, however, this demands further review of the results of the patients in the USA who received lesser post MMS reconstruction.
Introduction / Background

The Covid-19 pandemic caused initial chaos for breast service provision nationally. In our hospital, the first Lockdown period was challenging in terms of assessing patients on the 2WW pathway. Management of patients detected with cancer requiring surgery as part of their cancer pathway in a timely manner, was also challenging. This prompted a prospective audit, in our Trust. We compared cancer detection rates during Lockdown (March 2020 – May 2020) with pre-Covid cancer detection rates (Dec ’19 - Feb ’20).

Aims & Objectives

Primary Aims:

• To prospectively audit referral rates during Lockdown to our Breast Unit and compare with referral rates pre-Lockdown.

• Assess total cancer numbers detected during Lockdown (1st March ’20 - 31st May ’20) in comparison to cancer detection rates pre Covid-19 Lockdown (1st December ’19 - 28th February ’20)

Secondary Aim:

• To audit the re-excision rates after primary cancer surgery, to further assess Service Delivery during Lockdown.

Objectives:

• To audit the impact of lockdown on breast cancer detection rates and our service delivery

Materials & Methods

✓ Prospective data was collected from Trust Somerset records:
   - Total cancers detected from 2WW referrals prior to Lockdown (1st Dec ‘19-28th Feb ’20) as a guideline for workload.
   - Data collected during lockdown (1st March ’20 – 31st May ’20)

✓ Prospective GIRFT data for outcomes of surgery to ascertain re-operation rates.

✓ Trust policy, Regional & ABS guidelines adhered to during lockdown.

Results

<table>
<thead>
<tr>
<th>Month</th>
<th>Total GP Referrals</th>
<th>Benign Diagnoses</th>
<th>Cancers detected</th>
<th>Cancer incidence Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>December ’19</td>
<td>265</td>
<td>14</td>
<td>14</td>
<td>5.3%</td>
</tr>
<tr>
<td>January ’20</td>
<td>281</td>
<td>35</td>
<td>14</td>
<td>5%</td>
</tr>
<tr>
<td>February ’20</td>
<td>261</td>
<td>18</td>
<td>14</td>
<td>5.4%</td>
</tr>
<tr>
<td>March ’20</td>
<td>239</td>
<td>24</td>
<td>12</td>
<td>5%</td>
</tr>
<tr>
<td>April ’20</td>
<td>89</td>
<td>21</td>
<td>9</td>
<td>10.1%</td>
</tr>
<tr>
<td>May ’20</td>
<td>145</td>
<td>13</td>
<td>11</td>
<td>7.6%</td>
</tr>
</tbody>
</table>

Re-operations Dec’19-May’20

<table>
<thead>
<tr>
<th>Month</th>
<th>TOTAL CANCER OPERATIONS</th>
<th>TOTAL MARGINS POSITIVE</th>
<th>TOTAL POSITIVE</th>
<th>AXILLARY CLEARANCE AFTER SLNB</th>
</tr>
</thead>
<tbody>
<tr>
<td>DEC</td>
<td>28</td>
<td>3</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>JAN</td>
<td>40</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>FEB</td>
<td>24</td>
<td>2</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>MARCH</td>
<td>26</td>
<td>2</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>APR</td>
<td>41</td>
<td>2</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>MAY</td>
<td>23</td>
<td>3</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

CANCER INCIDENCE RATES DURING LOCKDOWN

<table>
<thead>
<tr>
<th>YEAR</th>
<th>TOTAL REFERRALS</th>
<th>CANCER INCIDENCE RATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>DEC 19</td>
<td>265</td>
<td>5.3%</td>
</tr>
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</tr>
<tr>
<td>MAY ’20</td>
<td>145</td>
<td>7.6%</td>
</tr>
</tbody>
</table>

Discussion

✓ During Lockdown, GP referrals reduced, but cancer detection rates almost doubled. Had the quality of referrals improved?

✓ All patients requiring surgery had tested Covid negative pre-operatively to prevent postop complications and reduce risk to staff.

✓ During Lockdown, >90% benign results were discharged via telephone and written correspondence.

✓ Our re-operation rates were minimal and well within national limits.

✓ True surgical breaches were due to Complex Diagnostic Pathway/patient choice reasons only.

✓ This data could easily be shared with GP colleagues to encourage discerning Breast Referrals during a second lockdown.

✓ Benign result follow-up can be reduced by offering increasing telephone/letter discharge.

Conclusions

✓ Practice within our Breast Unit remained structured.

✓ We were able to deliver a good breast service within the restrictions imposed by social distancing and rules of Lockdown.

✓ In the event of a second wave of Covid-19, this data should provide a boost and also serve as a bench-mark for future cancer detection rates in our Trust.

References

1. Association of Breast Surgery Guidelines
2. Trust Somerset Records
3. Trust Guidelines

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Poster 22: The Short Term Outcome of Early Oral Feeding on Resectable Gastric Cancer Patients: A Single Centre – Single Operator Study Evaluation on Low Volume Academic Centre

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Introduction / Background

Tumor resection is gold standard for gastric cancer management. Short term outcome was one of the main parameter of surgery that can be influenced by several factors. Early oral feeding was one of the factors which could influenced the short term outcome.

Methods and Materials

This was a retrospective study, taken from January 2018 until August 2019. All resectable gastric cancer patients were included. Tumor locations, type of resection and reconstruction were evaluated. All patients had early oral feeding from the first post operative day (POD) and continued with liquid and semi solid food. The short term outcome were recorded including the presence of anastomosis leakage and surgical site infection (SSI) during 30 days.

Objectives

We will evaluated the effectivity of early oral feeding on resectable gastric cancer patients in our centre.

Results

Seven patients were included, 6 patients were > 50 years old. The most common sites were corpus and antrum (3 patients each). Partial gastrectomy and antrectomy was done on them, total gastrectomy with roux en y esofago-jejunostomy was done on 1 patient with fundus gastric cancer. Billroth II reconstruction was our choice of procedure. All patients had early oral feeding on the first POD. They could tolerated well with no anastomosis leakage. No SSI found and no readmission associated with post operative morbidity. The types of reconstruction were not limited the efficacy of early oral feeding.

Discussion

Early oral feeding was safe and feasible on resectable gastric cancer undergoing many types of resection and reconstruction with no unfavorable outcomes.

Keywords: early oral feeding, gastric cancer, short term outcome

Conclusions

We will evaluated the effectivity of early oral feeding on resectable gastric cancer patients in our centre.

References


Case Presentation

Case of a female patient, 64 years old, non-smoker, without comorbidity, diagnosed and treated in Baia Sul Hospital, lung carcinoma reference center in south of Brazil. The presentation starts in June 2012, when the patient performed routine exams, that had identified a nodule in the right lung. The medical staff requested a PET-CT exam, which was observed a spiculated pulmonary nodule in anterior segment in right anterior lobe, measuring 8.6x8.6 inches - 2.2 x 2.2 cm (SUV max 4.9). It hasn't been identified lymphomagenically.

In July 20th, 2012: patient was committed in a thoracic surgery, performing a right superior lobeectomy. The tumor biopsy demonstrated an adenocarcinoma predominantly acinar with solid and lepidic, measuring 11 inches - 2.8cm, angiolymphatic invasion detected, lymph node chains 4, 7, 9 and 10 (8/9). Tumor staging: pT1bN0M0. Patient diagnosed with a non-small-cell lung carcinoma (NSCLC).

Abstract

The incidence of locoregional recurrence of non-small-cell lung carcinoma is high1, even in totally resected patients with small cell lung cancer, especially if there is evidence of mediastinal nodal involvement. The incidence is also high in patients with stage IA and IB carcinoma2, 5. This study presents the case of a 64-year-old non-smoker female patient who presented at first an adenocarcinoma in an anterior segment in a right superior lobe, treated with completion excision. After 6 years in remission, the patient was surprised with the presented of a new tumor in the same local as the earliest tumor. The histopathology showed the same cell pattern. The overall analysis from this case report allow us to see the important of clinical follow-up in oncological patient.

Key words: Lung Carcinoma, Locoregional Recurrence, NSCLC, Adenocarcinoma, Clinical Follow-up.

Introduction / Background

Nowadays, the lung carcinoma has more demises than breast, colon, prostate and lymphatic cancer all together in United States (USA) and world-wide. The operation therapy maintains as the preference choice for primary non-small-cell carcinomas of the lung3. Unfortunately the risks of having a recurrence in NSCLC after a complete resection in the first four years, still lie 6 to 10% per year, and the treatment for this patients keeps being challenging for the medical group4. Currently the option is to submit them to local radiotherapy or chemoradiotherapy, as demonstrated in the recent paper2, the locoregional recurrence patients who received the radiotherapy have had a better local response and prolonged the survival, the results demonstrated that the locoregional recurrences occurred in 19% of the postoperative cancer patients. Also, in other study5, the recurrence after complete resection occurs mostly along with distance metastases, as affirmed, the disease might be located, therefore, the response for the treatment in this stage agreed with the aforementioned, that radiation continues to be the best choice. Although the local disease, the patients manifested symptoms caused by the carcinoma, such as hemoptysis, cough, hoarseness, dyspnea, supraclavicular nodes and SVC syndrome. In the scientific publication commented previously6, the group formed by 32 patients, 19 of them had some of the disease-related symptoms previously written. Thereafter, this case report will elucidate a Brazilian patient with a locoregional recurrence, after the complete surgical approach of a non-small-cell lung, who has made the follow-up and treatment with a multidisciplinary group of physicians (constituted by radiologist, oncologist, thoracic surgeon and pathologist) to decide the best strand to be taken.

Timeline

Case of a female patient, 64 years old, non-smoker, without comorbidity, diagnosed and treated in Baia Sul Hospital, lung carcinoma reference center in south of Brazil.

1. June 2012: patient performed routine exams that had identified a nodule in the right lung.
   - The medical staff requested a PET-CT exam.
   - PET-CT: spiculated pulmonary nodule in anterior segment in right anterior lobe, measuring 8.6x8.6 inches - 2.2 x 2.2 cm (SUV max 4.9). It hasn’t been identified lymphomagenically.

2. July 26th, 2012: patient was committed in a thoracic surgery, performing a right superior lobeectomy.
   - Diagnosis: adenocarcinoma predominately acinar, measuring 11 inches - 2.8cm, angiolymphatic invasion detected, lymph node chains 4, 7, 9 and 10 (8/9). Tumor staging: pT1bN0M0.


4. April 13th, 2018: requested CT of the thorax, which was detected a nodule, right parahilar area in the right lung.
   - Requested PET-CT: local area with an increased metabolic activity around the surgical suraces at the parahilar area in the right lung, measuring 14cm, SUV 11.6
5. June 27th, 2018: medastinal tumor and lymph node resection of the 7th chain.
   - Biopsy: invasive adenocarcinoma with acinar pattern (70%) and minimally differentiated solid areas (30%). Perineural and angiolymphatic invasion. Bronchial invasion with the infiltration presence. Coincident margins. Lymph node chain 7 (0/1). EGFRI mutation non-detected. Negative ROS-1 (6q22). PD-L1 60%. Positive ALK (FISH).
   - Diagnosis: NSCLC.

   - PET-CT: small nodular pulmonary density in anterior segment in right anterior lobe.
   - Smoking segment of the lung, measuring 11 inches - 2.8cm, angiolymphatic invasion detected, lymph node chains 4, 7, 9 and 10 (8/9). Tumor staging: pT1bN0M0.

7. August 8th, 2018: requested a PET-CT, which had non-evidence of the carcinoma.

8. Nowadays, the patient is in follow-up with August 2018, with non-evidence of the carcinoma.

References


Discussion

In this case report, it was exemplified a lung cancer case, that after 6 years of resection, had a recurrence, in same locations that the patient was submitted for the carcinoma extraction, having a brief review in the NSCLC recurrence, the symptoms that can open the case, the best strategies the staff can offer the important of the follow-up in oncological patients.

Reported for the first time in 1994 that the recurrence way doesn’t differ the pathological stage in the surgical moment. Mainly, the first recurrence local is in distance organs, such as brain, bones and lung, frequently with limited metastasis, as well as in number or organs. The local recurrence is defined as a recurrent disease in the ipsilateral hemithorax and mediastinum, excluding the pulmonary lesions. Previously, the recurrence after a total extraction surgery of the carcinoma was seen as a local failure of the treatment. Nowadays, the medical community knows the possibility that the tumor has to return to the same place previous located in or other organs, calling and diagnosing this as recurrence tumor. For the oligometastatic disease, the characteristic is to have a quite heterogeneous concept, normally embraces from 3 to 5 places of metastatic disease.

The therapeutic strategy adopted for this recurrent carcinoma was the Intensity-Modulated Radiotherapy (IMRT), the major player on the sharp resolution of the disease previously described. The goal in this treatment is to concentrate the biggest possible radiation dose in the volume target, having more efficiency and less tissue damage than the 3D conformal RT, minimizing the side effects of the treatment. In a study with NSCLC patients with postoperative locoregional recurrence, the 2-year OS, PFS, LRs and DMFS rates were respectively 84.2, 42.5, 70 and 50.2%, demonstrating that the radical radiotherapy used with IMRT was effective. Offering the dose escalation, the literature shows that this strategy reduces lung toxicity compared to others, increasing the lung VS in half of the patients tested in the study.

Wherefore, the locoregional recurrence post-surgery can be controlled by the RT, chiefly when it has the characteristic of being a small tumor, these patients there is a higher chance of persisting located without hematogenic metastasis. When consider able, the surgical approach can be a choice of treatment.

Contact

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Figure 1. Timeline.
INTRODUCTION
At the peak of the COVID-19 pandemic many urological cancer diagnostic and management services were significantly restricted. The impact on patient care has been immense and the decision-making around how to manage urological cancers has been complex. Guidelines have been produced during the peak of the pandemic to adapt cancer pathways in order to limit the effects of COVID-19 on cancer patients. However, the guidelines have been in a continual state of adaptation and it is clear that guidance has varied internationally.

OBJECTIVES
Our aim was to compare the COVID-19 specific guidelines on the diagnosis and management of the main urological cancers.

We investigated the differences in approach between the UK, Europe and the US with a view to assessing the long term impact of these differences.

METHODS
We used various urological institutions to represent the different regions. For the UK, the British Association of Urological Surgeons (BAUS) [1]. For Europe, the European Association of Urology (EAU) [2]. For the US, the Cleveland clinic recommendations [3].

We qualitatively evaluated and compared the guidelines for the main urological cancers. These included upper tract urothelial, prostate, bladder and kidney cancer.

RESULTS
Across all urological cancer-types the UK favoured more of a conservative approach compared with Europe. The US used more aggressive strategies than both Europe and the UK. The US were more likely to advocate surgical intervention.

DISCUSSION
We have found that there has been significant variance in the diagnosis and management of patients with urological malignancy globally throughout the COVID-19 pandemic.

The UK favoured a conservative approach and the US more likely to opt for surgical intervention.

The long-term consequences in these changes to practice are unknown. Further study is needed into why there exists such differences and how we can work together, internationally, to formulate agreed upon diagnosis and management strategies.

Cohort studies will be also be needed to compare long-term outcomes of these differing approaches to diagnosis and management.

CONCLUSIONS
It is clear that the diagnosis and management of urological cancers during the COVID-19 pandemic differs internationally.

It is our hope that lessons can be learned from the first wave of the COVID-19 pandemic as the UK now enters the second wave.

As we face another re-structuring of cancer services we can be better equipped through international collaboration to prioritise services appropriately and safely.

This can ensure that patient pathways receive as little disruption as possible and cancers are not allowed to progress beyond the realms of treatment.

REFERENCES


UK: BAUS

EUROPE: EAU

US: Cleveland Clinic

Upper Tract Urothelial Carcinoma

UK: BAUS

EUROPE: EAU

US: Cleveland Clinic

Low risk

Diagnosis

Imaging

Treatment

Defer

Imaging + Biopsy

Defer by 6 months

Defer by 6 months

Defer by 6 months

Intermediate risk

Diagnosis

Imaging

Treatment

Defer

Imaging + Biopsy

Defer by 3 months

Defer by 3 months

Defer by 3 months

High risk

Diagnosis

Imaging

Treatment

Defer

Imaging + Biopsy

Defer by 1 – 3 months

Defer by 1 – 3 months

Defer by 1 – 3 months

Metastatic

Diagnosis

Imaging

Treatment

Palliative radiotherapy

Palliative radiotherapy

Offer palliative surgery

Bladder Carcinoma

UK: BAUS

EUROPE: EAU

US: Cleveland Clinic

Low risk

Diagnosis + Treatment

Defer

Defer by 6 months

Defer by 6 months

Defer by 1 – 3 months

Intermediate risk

Diagnosis + Treatment

Defer

Defer by 3 months

Defer by 3 months

Defer by 1 – 3 months

High risk

Diagnosis + Treatment

Defer

Defer by 1 – 3 months

Defer by 1 – 3 months

Defer by 1 – 3 months

Muscle invasive / Metastatic

Diagnosis + Treatment

Defer

Defer by 6 months

Defer by 6 months

Defer by 6 months

Renal Carcinoma

UK: BAUS

EUROPE: EAU

US: Cleveland Clinic

Low risk

Diagnosis

Imaging by 6-9 months

Treatment

Surveillance

Defer by 6 months

Defer by 6 months

Defer by 6 months

Intermediate risk

Diagnosis

Imaging by 6-9 months

Treatment

Defer

Defer by 6 months

Defer by 1 – 3 months

High risk

Diagnosis

Urgent assessment

Treatment

Surveillance

Imaging + Biopsy

Surgery

Surgery

Surgery

Metastatic

Diagnosis

Imaging by 6-9 months

Treatment

Surveillance or Chemotherapy

Defer by 6 months or Chemotherapy
Retroperitoneal masses are rare but important group of neoplasms that pose a diagnostic challenge for medical physicians. Most of them are malignancies and are more prevalent in adults. However, they can occur at any age. Failure to recognize them on imaging can lead to inappropriate management. The most common subtypes of retroperitoneal malignancies are liposarcoma (70%) and leiomyosarcoma (15%), which have characteristic imaging appearances. We report herein our experience of 10 years of surgical management of retroperitoneal masses.

**Introduction**

We evaluated 31 patients with retroperitoneal masses operated in our department from August 2010 till July 2020 with regard to patients’ demographic characteristics, intra-operative time, the location and size of tumor, histological grade and local recurrences.

**Methods and Materials**

The mean age of patients was 54 years (range, 18 to 85). Fourteen (45.16%) were female, and seventeen (54.84%) were male. The mean intra-operative time was 214 minutes (range, 65 to 720 minutes). Four patients (12.90%) were reported to have benign tumors, while 27 (87.10%) were reported to have malignancies. The most frequent malignant tumor was liposarcoma. The mean tumor size was detected 13.87 cm. The earliest local recurrence was detected in the 9th month and the latest in the 48th month.

**Results**

The mean age of patients was 54 years (range, 18 to 85). Fourteen (45.16%) were female, and seventeen (54.84%) were male. The mean intra-operative time was 214 minutes (range, 65 to 720 minutes). Four patients (12.90%) were reported to have benign tumors, while 27 (87.10%) were reported to have malignancies. The most frequent malignant tumor was liposarcoma. The mean tumor size was detected 13.87 cm. The earliest local recurrence was detected in the 9th month and the latest in the 48th month.

**Discussion**

Out of 31 patients who were operated for retroperitoneal mass, follow up was performed in 20 patients. 15 of these 20 patients (75%) had a local recurrence, whereas 4 of them (20%) were dead.

**Conclusion**

Retroperitoneal masses are rare and the majority of them are malignancies. Early recognition is very important and complete surgical resection in high-volume centers is the best remaining treatment option.

**References**

**Introduction / Background**

Axillary conservation is the way forward after game changing trials like ACOSOG Z0011, surrogate trials like IBCSG,AMAROS, ALMANAC, on-going POSNOC, and newbie ATNEC have decreased the need to fiddle with the axilla. Current standard is the utilisation of double technique with radioisotope and blue dye to decrease false negative rates for true sentinel node retrieval.

**Methods and Materials**

Literature search on the topic in the last two decades.

**Accuracy of SNB in early breast cancer**

<table>
<thead>
<tr>
<th>Study</th>
<th>Year</th>
<th>SLN IR(%)</th>
<th>Sensitivity(%)</th>
<th>False negative(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Veronesi</td>
<td>2003</td>
<td>98.5</td>
<td>91.2</td>
<td>8.8</td>
</tr>
<tr>
<td>ALMANAC</td>
<td>2006</td>
<td>98.0</td>
<td>93.3</td>
<td>6.7</td>
</tr>
<tr>
<td>Sentinelle-GIVOM</td>
<td>2009</td>
<td>95.0</td>
<td>83.3</td>
<td>16.7</td>
</tr>
<tr>
<td>SNAC</td>
<td>2009</td>
<td>94.0</td>
<td>94.5</td>
<td>5.5</td>
</tr>
<tr>
<td>Canaveese</td>
<td>2008</td>
<td>98.6</td>
<td>77.1</td>
<td>9.1</td>
</tr>
<tr>
<td>NSABP -32</td>
<td>2007</td>
<td>97.3</td>
<td>90.2</td>
<td>9.8</td>
</tr>
</tbody>
</table>

**Results**

The search yielded 197 publications which were subjected to a meticulous review and to extrapolate suggested guidance.

**References**

2. Mamounas Optimal Management of the Axilla: A Look at the Evidence Elektherios (Terry) P. Mamounas, MD, MPH

**Contact**

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Poster 41: Developing a non-biopsy protocol for the female cohort 25-29 years with clinically typical fibroadenoma conforming to Maxwell criteria on ultrasound – Our peninsular experience in Wirral

Tahera Arif  Raman Vinayagam Mahmoud Mostafa
Wirral Breast Unit, Clatterbridge Hospital, Wirral

Introduction / Background
To introduce a non – biopsy protocol in our department for benign breast lump referrals confirmed as typical U2/3 fibroadenoma on imaging in 25-29 yrs cohort.

Objectives
The cohort of women between 25-29 years of age with sonographic features (Maxwell non-biopsy criteria) U2/3 typical of fibroadenoma does not miss malignancy. Current UK guidance is not to biopsy sonographically typical fibroadenomas in women under 25 years. We have studied our population extending the radiological Maxwell criteria reflecting histologically benign outcomes even in this group of 25-29 years.

Methods and Materials
- Retrospectively data was collected of all women between 25-29 years of age undergoing core biopsies for ultrasound confirmed both simple and complex fibroadenomas at Clatterbridge General Hospital between 2014 and 2019 over a period of five years.
- The number of cancers picked up was compared with the number of referrals and the discordance between radiological diagnosis of fibroadenoma and histopathological confirmation of malignancy was recorded.

Maxwell’s criteria/Sonographic features:
1. Well-defined, ovoid shape
2. Flat lesion, ie Height < Width
3. <3cm dimension
4. Smooth outline / Gently lobulated (2-3 lobulations)
5. Homogeneously isoechoic or slight hyperechoic, solid
6. Thin echogenic pseudocapsule
7. No calcification.
8. No posterior acoustic shadowing.

Details of the nine carcinomas found in women less than 30 years of age.

<table>
<thead>
<tr>
<th>Case</th>
<th>Age (years)</th>
<th>Clinical</th>
<th>Ultrasound</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>28</td>
<td>Not known</td>
<td>Not known</td>
<td>Previous contralateral breast cancer at age 22 years</td>
</tr>
<tr>
<td>2</td>
<td>28</td>
<td>Suspicious</td>
<td>Not performed</td>
<td>Previous radiotherapy</td>
</tr>
<tr>
<td>3</td>
<td>28</td>
<td>Not known</td>
<td>Solid mass (indeterminate)</td>
<td>Bilateral disease (impalpable on other side)</td>
</tr>
<tr>
<td>4</td>
<td>22</td>
<td>Not known</td>
<td>Ill defined mass (malignant)</td>
<td>Li Fraumeni syndrome</td>
</tr>
<tr>
<td>5</td>
<td>28</td>
<td>Suspicious</td>
<td>Two ovoid microlobulated masses (probably benign)</td>
<td>Previous radiotherapy</td>
</tr>
<tr>
<td>6</td>
<td>28</td>
<td>Probable fibroadenoma (benign)</td>
<td>Two ovoid microlobulated masses (probably benign)</td>
<td>Stavros criteria not met</td>
</tr>
<tr>
<td>7</td>
<td>26</td>
<td>Suspicious</td>
<td>No discrete mass (probably benign)</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>29</td>
<td>Indeterminate</td>
<td>Malignant</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>27</td>
<td>Indeterminate</td>
<td>Malignant</td>
<td></td>
</tr>
</tbody>
</table>

Results
- We saw increment in referrals in this group of young women from n=260 to n=386 over the five year study period. A total of 1707 referrals were made across five years. n =175 image guided core biopsies were carried out for U2, U3 , U4 lesions appearing as fibroadenomas on ultrasound. Out of these (n= 175), all lesions coded U2/3 (n=165) based on Maxwell criteria on ultrasound were negative for cancer. U4 lesions on ultrasound were confirmed as cancers mimicking fibroadenomas (n=10).

Conclusions
- This retrospective audit of 1707 patients provides sound evidence for safe non-biopsy of typical fibroadenomas in women 25–29 years when clinical and sonographic features meet strict criteria.
- We started using the non-biopsy protocol using Maxwell criteria for U2/3 lesions. We discharged women in this group if they met all the protocol criteria, i.e., their lesion does not appear suspicious clinically, has all the ultrasound appearances typical of a fibroadenoma U2/3, and they do not have any compounding circumstances (e.g., family history, genetic predisposition).
- As routine, we advise all women who are discharged without follow-up to examine their breasts regularly and return if they detect any changes including increase in lesion size.
- We need data to be audited prospectively and provide level 1 evidence to the same effect.

References

Contact
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n=175
U 2/3 on USS were FA only on biopsy
U 4 on USS were cancers on biopsy mimicking FA on USS
Introduction / Background
Magseed is a novel localization technology in which a tiny seed is inserted to accurately mark the site of breast tumour. These can be detected intra-operatively by sentimag localization system. This can be implanted days prior to surgery and do not require use of radioactive material. It aids localization of impalpable breast lesions improving margin clearance rates.

Methods and Materials
A study was undertaken of 50 patients undergoing Magseed localization of non-palpable breast lesions in rural and urban areas of Wirral Peninsula in the UK. Data including age, mode of localization (Stereo-guided/ Ultrasound guided), presentation (Symptomatic/Screen detected), and time to surgery after localization, size and weight of specimen, histology and re-excision rates was collected between June 2019 and November 2019.

Results
A total of 50 patients had 52 Magseed inserted. n=14 were symptomatic, n=35 were screen detected and n=1 was an incidental finding on surveillance mammogram for a BI- lesion. All 50 patients had therapeutic surgery. 30 seeds were inserted on the right and 22 were inserted on the left (two were bilateral). 44 seeds were inserted under Ultrasound guidance and the rest were targeted under stereo guidance (n=8). Deployment of 2 Magseed resulted in malposition requiring wire localization. Mean age of subjects was 59.76 (range 31-81) years. Mean time to surgery after Magseed insertion was 8.84 (range 1-27) days. Mean weight of the specimen was 48.37 (range 10-264) gm. Mean size of the lesions was 20.32 (range 8-63) mm. Redo surgery for margin clearance was performed bringing the re-excision rate to 15.38% (n=8).

Conclusions
We conclude that Magseed localization of breast tumours is a safe and reliable technique in terms of accuracy, localization and clearance of margins without any radiation concerns. Our re-excision rate for margin clearance is comparable to the national average. The only caveat we observed was localization of impalpable lesions prior to surgery in bulky breasts where we had to utilize wire guided localization on the day of surgery. Large scale data are lacking to compare Magseed localization with other localization techniques for non-palpable breast lesions.

Discussion
• Using magnetic seeds for localization can avoid well-known disadvantages of wire localization, which include displacement of the wire, technical difficulties during surgery and more importantly inconvenience to patients. Also, as wire placement occurs on the day of surgery, it can create capacity issues with radiology, and also theatre list scheduling.
• Alternative methods such as Iodine (125I) radioactive seed localization (RSL) and Radio Occult Lesion Localisation (ROLL) proved to be reliable and are used in number of centres. Despite the effectiveness of these techniques the nuclear medicine regulatory requirements have limited their widespread implementation.
• Magseed system can overcome these limitations whilst achieving comparable effectiveness. Limitations to this novel method include technical difficulties encountered in extremely deep lesions. Another challenge is that ferromagnetic instruments will interfere with the signal, so special non-ferromagnetic surgical instruments are necessary.
• Electrocautery or other metallic equipment in the operating room can also interfere with the signal, requiring recalibration of the probe.
• There is a learning curve for both the radiologists and surgeons during the early period.
• We will continue auditing our work and also participate in the national audit of Magseed localization (iBRA-net).
Appendix tumors in patients undergoing appendectomy for appendicitis: A retrospective study

Francesk Mulita, MD, MSc, PhD; Nikoleta Oikonomou, MD; Elias Liolis, MD; Levan Tchabashvili, MD; Ioannis Maroulis, MD, PhD

1General University Hospital of Patras

Introduction

Primary cancers of the appendix are rare and most of them are usually found accidentally on appendectomies performed for appendicitis. Although these tumors are rare, there is a diverse histology.

Methods and Materials

We conducted a single-centre retrospective study of patients undergoing appendectomy at our institution for the suspended diagnosis of appendicitis. From January 2003 to December 2018 a total of 1809 patients underwent appendectomy under general anesthesia. Patient demographics, type of procedure and tumor histology were recorded.

Results

The mean age of patients was 32 years (range, 14 to 85). Of these patients 821 (45.38%) were female, and 988 (54.62%) were male. In total 959 (53.01%) underwent laparoscopic appendectomy and 850 (46.99%) underwent open appendectomy.

Appendiceal neoplasm was found in 17 patients (0.94%). Of these 17 patients 4 (23.53%) were reported to have benign tumors, while 13 (76.47%) were reported to have malignancies. The most frequent appendiceal tumor was carcinoid, which was detected in 10 patients (58.82%).

Discussion

There are several kinds of appendix tumors, some of which are cancerous and some of which are not. The two main types of appendix cancer are called carcinoid tumors and carcinomas. Out of 1809 patients who were operated for appendicitis, 13 (0.72%) had a malignancy.

Conclusion

Tumors of the appendix are very rare and the majority of them are malignancies. Early recognition is very important. There is no standard of care due to rare frequency of these tumors.

References

LYNCH SYNDROME IN THE UK: THE CLINICAL PROBLEM
• Estimated 175,000 people with LS BUT only 5% of cases identified
• If we can identify those with LS, and families at risk, then surveillance can be undertaken
• Surveillance with colonoscopy – reduced risk of dying from colorectal cancer (CRC)
• CRC with microsatellite instability (seen in LS) less responsive to fluorouracil
• Therefore identifying LS has important implications in patient treatment
• Testing for LS at time of bowel cancer diagnosis in the UK is poor
• In Wales NONE of the seven health boards were routinely testing for LS

WHAT WERE THE BARRIERS IN WALES?
• 7 different health boards with different populations and funding streams – territorial constraints
• Wales does not have CCGs – commissioning of services is via devolved Welsh Government (WG)
• Ensuring regional equity across the country
• Limited expertise and resources (i.e. few laboratories and personnel able to undertake testing processes)
• Quality assurance - how to ensure nationwide standards

WHERE SHOULD IT BE DONE?
Recommend mismatch repair (MMR) IHC in all CRC aged <50y or by request

WHICH PERSONNEL WILL DO IT?
Expert clinicians and scientists, MDT representation in a working group to develop the testing pathway and work around barriers in the context of health economics and logistics of the All Wales service

WHEN? 2014:
• ROYAL COLLEGE OF PATHOLOGISTS (RCPath)
• Recommend mismatch repair (MMR) IHC in all CRC aged <50y or by request
• “There is a strong case for testing all CRC, but resource implications mean it cannot be considered at this time”

2016: Welsh Government disengagement from process

2017-2018:
• Lynch Syndrome Testing Working Group set up: Expert clinicians and scientists, MDT representation in a working group to develop the testing pathway and work around barriers in the context of health economics and logistics of the All Wales service
• Either a biopsy, or a resected tumour can be tested. If there is a greater tumour density then MSI analysis using polymerase chain reaction is performed, followed by methylation analysis using next generation sequencing. Alternatively immunohistochemistry (IHC) for certain genes is undertaken.

HOW ARE WE DOING?
Lynch Syndrome Testing Pathway
• 9 patients with Lynch Syndrome identified
• All health boards in Wales have utilised this service
• 326 referrals

2018:
• Agreement of all Health Boards in Wales on working group proposals – BUT Government declines commissioning service

2018-2019:
• Working Group and agree on LS testing for all CRC in Wales as per NICE Guidance

12th JULY 2019:
• Launch of LS Testing Pathway in Wales – the first UK nation to do so

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Cardiff and Vale Health Board

Acknowledgements
Deborah Alsina MBE – CEO Bowel Cancer UK, all patients and members of public who lobbied for this testing
Working group – R Adams, R Butler MBE, R Hargest (chair), R Hopes, C Morgan, M Morgan, R Morgan, A Murray, S Palmer-Smith, C Rees, M Rogers, R White
All Wales Genetics Laboratory
All Wales Medical Genetics Service
Wales Cancer Network

HOW WILL IT BE FUNDED?
• Bowel Cancer UK/Charity Lobbying
• Freedom of Information Requests
• UK “Time to Test” campaign
• Engagement with local / national media
• May 2018 – Bowel Cancer Debate at Welsh Assembly Government

10th MAY 2018:
• Agreement of all Health Boards in Wales on working group proposals – BUT Government declines commissioning service

12th JULY 2019:
• Launch of LS Testing Pathway in Wales – the first UK nation to do so

CONCLUSION
Wales has a devolved health service, with difficult structural/funding challenges, particularly when encountering government level resistance. This is a remarkable achievement and an excellent example of how multidisciplinary collaboration and patient group engagement can produce change in national strategy that has already improved the care of many patients.
Poster 48: Value of butyrylcholinesterase as a marker of a surgical site infection following surgery for colorectal cancer

Francesk Mulita, MD, MSc, PhD; Elias Liolis, MD; Nikoleta Oikonomou, MD; Levan Tchabashvili, MD; Ioannis Maroulis, MD, PhD; George Panos, MD, PhD

1 General University Hospital of Patras

Butyrylcholinesterase (BChE) is a α-glycoprotein synthesized in the liver. BChE’s serum level decreases in many clinical conditions such as acute and chronic liver damage, inflammation, injury and infections, and malnutrition.

Introduction

Methods and Materials

Over a 15 months period, between June 2019 and August 2020, we prospectively evaluated 141 patients undergoing five elective procedures for colorectal cancer. Blood samples were collected preoperatively (at day 0), post-operatively in the recovery room (day 1), and on the subsequent four days (day 2, 3, 4 and 5) for assessment of BChE, C-reactive protein and white blood cell concentrations. The same surgical team operated all patients and was blinded to the study. Patients were monitored for post-operative infection by using standard laboratory and clinical methods. If surgical site infection (SSI) was suspected the wound was swabbed and empirical antibiotics were started.

Results

The mean age of patients was 72 years (range, 42 to 85). Of these patients 65 (46.1%) were female, and 76 (53.9%) were male. SSI was occurred in 27 (19.15%) patients.

A decreased BChE activity in patients with SSI was observed, as compared to patients with healthy trauma.

Discussion

Butyrylcholinesterase (BChE) is an important enzyme synthesized in the liver. The normal range of BChE is roughly from 4500 U/L to 15,000 U/L in adult population. It is usually as a prognostic biomarker of liver diseases such as viral hepatitis, cirrhosis, hepatocellular carcinomas, and even liver failure as well as an important clinical marker in inflammation, severe bacterial infection, and fungal infection. Importantly, reduced BChE indicates severe systemic inflammation in critically ill patients.

BChE levels (in U/L) were measured in 144 patients; <4500 was defined as “low” and ≥4500 as “normal.” 17 out 27 patients with site infection (63%) had BChE level < 4500, whereas only 22% (25/114) of patients with healthy trauma had low level of BChE.

Conclusion

The current study demonstrates that BChE is a reliable marker for the presence of SSI in patients undergoing colorectal surgery.

References


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Figure 1. Crystal structure of fully glycosylated human butyrylcholinesterase

Figure 2. Wound dehiscence after severe surgical site infection

Chart 1. Surgical site infection out of 141 patients who underwent colorectal surgery

Chart 2. BChE level <4500 on postoperative day 3 between patients with healthy trauma and patients with site infection

Figure 3. Butyrylcholinesterase (BChE) as an α-glycoprotein synthesized in the liver.
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.

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

Unplanned revisions 81/163 (56 once, 15 twice, 7 three times, 3 four times)
• Reasons for Revisional surgery: included wound break downs (infection/necrosis), implant repositioning, implant removal for pain, removal of redundant skin, and lipomodelling.

Nipple release
Lipofilling
Aesthetic reasons
Implant removal: Neuropathic pain
Implant removal (patient request)
Capsulectomy
Implant rupture
Larger Implants (patient request)
Repositioning
Necrosis
Infection

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.
Background

Isolated mastalgia is frequently seen under the 2WW criteria but has long had a controversial role in the identification of breast malignancy. 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%. Given the current extension in waiting times 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

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Patient Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lump</td>
<td>238 (38%)</td>
</tr>
<tr>
<td>Pain</td>
<td>196 (31%)</td>
</tr>
<tr>
<td>Lump + Pain</td>
<td>72 (12%)</td>
</tr>
<tr>
<td>Nipple symptoms</td>
<td>31 (5%)</td>
</tr>
<tr>
<td>(discharge, bleeding, skin changes)</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
</tr>
<tr>
<td>(Implant complications, Abscess, Asymmetry, Asymptomatic)</td>
<td>31 (5%)</td>
</tr>
<tr>
<td>Screening detected changes</td>
<td>20 (3%)</td>
</tr>
<tr>
<td>In incidental finding</td>
<td>18 (3%)</td>
</tr>
<tr>
<td>Skin changes</td>
<td>12 (2%)</td>
</tr>
<tr>
<td>Gynaecomastia</td>
<td>4 (1%)</td>
</tr>
<tr>
<td>Lump + Skin changes</td>
<td>1 (1%)</td>
</tr>
</tbody>
</table>

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.

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 US 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. 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 Hillingdons 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.

References:

1. Rebolledo S, 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/services/research-and-care/see-the-research/ // 57% \( \times \) 90 \( \times \) 69% \( \times \) 29% \( \times \) 4% \( \times \) 96% \( \times \) 57% \( \times \) 9% \( \times \) 29% \( \times \) 4% \( \times \) 96%
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 morbidity, the conservative approach is a popular option for both surgeon and patient.[1,2]

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
   - 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 consisted of 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.

Conclusions

I conducted a retrospective review of information from patient notes, histopathology reports and radiotherapy 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.

References

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.

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.

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.
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

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.

![Flow diagram of patients diagnosed with rectal cancer.](image)

Methods and Materials

A retrospective analysis was performed on rectal cancer patients diagnosed at BHRUT from May 2013 to June 2020. Electronic health records such Somerset Cancer register and Trust software – EPIC, 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, RO Salvage Surgery Rate and Distant failure.

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 110[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 important 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

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References

Background

Locally advanced colorectal cancer (LACRC) is defined as T4, NO-2 and MO tumours

These frequently metastasize intraoperatively 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)

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 systematically reviewed four randomised 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.

References


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

There is a poor evidence-base for predicting risk of pathological fracture in patients with bone metastases. Radiological scoring systems like Mirels fail to incorporate patient-specific variables like primary cancer type and patient age.

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

The pilot study included 101 lesions in 60 patients: 52% of females, 48% of males. 70% had died by 71/101, median survival 159 days. 28% of lesions were active by 28/101, mean follow-up 1.9 years.


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

In this cohort, factors associated with ↑ fracture rate included:
- Mirels score (p=0.015)
- X-ray appearance (p=0.0017)
- 9/34 Mirels ≥9
- 5/65 Mirels <9
- 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.

REFERENCES

CONTACT
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THANKS TO:
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PhD supervisors

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

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

Results
The pilot study included 101 lesions in 60 patients:
- 52% female, 48% male
- 70% dead by 71/101, median survival 159 days
- 28% active by 28/101, mean follow-up 1.9 years

13.9% fracture rate at 12 months (14/101)
Aims: Postoperative atrial fibrillation (AF) after oesophagectomy is associated with pulmonary and anastomotic complications. Landiolol hydrochloride is an ultra-short-acting β1-selective blocker that may prevent AF via its anti-inflammatory and β-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 SRCTN 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 transhiatal oesophagectomy. Fixed-effect model was applied to 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 120 patients. The included population were comparable in terms of age (57 vs 66, mean difference (MD): 1.22, 95% confidence interval (CI): -4.53, 5.97, P=0.42), gender (male: 73% vs 64%, 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 vs 391 ml, MD: 22.95, 95% CI: -9.56, 53.97, P=0.11), and operative time (888 vs 864 min, MD: -12.06, 95% CI: -36.57, 11.45, 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 to placebo (MD: -11.00, 95% CI: -17.39, -4.61, P=0.0007) without any adverse effect on systolic (MD: -1.68, 95% CI: -2.77, -0.61, P=0.61) and diastolic blood pressure (MD: -1.87, 95% CI: -4.74, 0.90, P=0.25). A low level of heterogeneity among the studies existed (Q=0.2%, P=0.66). The information size was calculated at 156 patients and trial sequential analysis showed that the risk of type I error was minimal.

Table 1. Baseline characteristics of the included studies

<table>
<thead>
<tr>
<th>Study</th>
<th>Country</th>
<th>Design</th>
<th>Population</th>
<th>Exclusion criteria</th>
<th>Randomisation</th>
<th>Landiolol regimen</th>
<th>Control regimen</th>
<th>Detection of arrhythmias</th>
</tr>
</thead>
</table>
| Kim et al. 2017 | South Korea | Randomised controlled trial | Patients undergoing oesophagectomy for oesophageal cancer | History of cardiac, pulmonary and renal disease, history of arrhythmia, history of anaemia, history of hypertension and diabetes, history of preoperative 

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

M Smith, S Mason, D Duva, R Devonshire, H McCormack, A Bhawnani, D Mayhew, M Shackcloth
Liverpool Heart and Chest Hospital, University of Liverpool

Background

- Post-operative analgesia post thoracic surgery is challenging despite the widespread adoption of minimally-invasive surgery
- 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
- 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

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).

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

Contact

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

<table>
<thead>
<tr>
<th>Month</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>April</td>
<td>15</td>
<td>10</td>
</tr>
<tr>
<td>May</td>
<td>19</td>
<td>2</td>
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<td>June</td>
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<tr>
<td>August</td>
<td>9</td>
<td>4</td>
</tr>
<tr>
<td>September</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>Mean (SD)</td>
<td>10.33 (5.64)</td>
<td>5.17 (2.89)</td>
</tr>
</tbody>
</table>

References


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 optimise 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, optimisation 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 patients across the South Yorkshire region. Ethical approval was granted by the Health Research Authority (Ref: 19/HRA/5984) 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 33 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).

Experience of assessment of suitability for major surgery

There was variation between clinicians, subspecialties and units in how patients are currently assessed, with variable guidelines of cardiology examination, 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.

Thematic analysis

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.

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 optimisation programmes.

Theme 3: Decision-making in older patients

Clinical factors, patient factors and usual practice influenced decisions regarding timing of 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.

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 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.
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

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.

**Introduction / Background**

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). 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). 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). 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).

**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 footfall 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.
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.

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.