

KS4

2019

4th KSS Surgical Symposium
&
Thomas Vicary Prize Day

Friday 21st June 2019
Maidstone Hospital Academic Centre

PROGRAMME & ABSTRACTS

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Symposium Programme

8:15 am	Registration & Breakfast <i>NB: Poster presenters to hang posters on allocated poster boards by 9am</i>

9:00 am	Introduction and welcome <i>Mr Daniel Lawes MD FRCS; Consultant Colorectal Surgeon Maidstone and Tunbridge Wells NHS Trust</i>
9:15 am	Plenary Talk 1: Bayes, coagulopathy and limb loss in trauma: what's the connection? <i>Colonel Nigel Tai MS FRCS; Consultant Trauma and Vascular Surgeon & Clinical Senior Lecturer Queen Mary, University of London and The Royal London Hospital</i>
10:00 am	Case Report Prize Session <i>Chairs: Mr Daniel Lawes & Miss Shirley Chan</i>

11:20 am	Coffee break and Poster Viewing

11:45 am	Ethicon sponsors presentation
12:00 pm	Thomas Vicary Prize Session 1 <i>Session introduction by Miss Victoria Pegna (on behalf of the Worshipful Company of Barbers) Chairs: Mr Charles Bailey & Miss Elizabeth Shah</i>

1:20 pm	Lunch and Poster Viewing

2:00 pm	Plenary Talk 2: Advanced endoscopic resections and the rise of AI-augmented decision-making in lower GI endoscopy <i>Mr Aryn Haji MD FRCS; Consultant Colorectal Surgeon King's College Hospital, London</i>
2:45 pm	Pan-KSS Collaborative projects update <i>Victoria Pegna</i>

3:00 pm	Coffee Break and Poster Viewing <i>NB: Posters to taken down at the end of this session</i>

3:15 pm	Thomas Vicary Prize Session 2 <i>Chairs: Mr Pasha Nisar & Mr Chris Wright</i>

4:30 pm	Coffee Break & Academic Panel Meeting

4:45 pm	Prizes and closing remarks <i>Mr Daniel Lawes</i>

POST-CONGRESS DRINKS AT ROCKIN' ROBIN ON THE GREEN – ALL WELCOME

Invited Speakers



Mr Aryn Haji MD FRCS

Consultant Laparoscopic Colorectal Surgeon

Honorary Senior Lecturer; King's College Hospital, London

Mr Aryn Haji was appointed as a Consultant in Colorectal and Laparoscopic Surgery at King's College Hospital NHS Foundation Trust in 2011. He is currently the clinical lead for colorectal surgery and endoscopy at King's College Hospital and an Honorary Senior Lecturer at King's College London.

His clinical practice primarily consists of laparoscopic colorectal surgery and advanced colonoscopy.

His research and clinical interests are in utilization of high frequency colonoscopy ultrasound in the staging of colorectal polyps and cancer. He completed a fellowship in advanced colonoscopy with Professor Kudo at Showa University in Japan in 2010 and since then has developed a practice of endoscopic mucosal resection and endoscopic submucosal dissection in the treatment of colorectal polyps. He also leads the interventional luminal endoscopy service at King's including performing natural orifice surgery (Peroral endoscopic myotomy – POEM) for the treatment of Achalasia.

Specialising in trauma and vascular surgery, Colonel Tai balances his career between clinical practice in both a civilian and military context. His experience in either setting is directly applicable to the other and that drive for cross-fertilisation of learning, and indeed preparatory training both within the NHS and Army environments is something that he constantly strives to promote.

His research interests include the use of probability-based modeling to aid in 'real-time' clinical decision-making (e.g. predictive factors for limb amputation after poly trauma) and for use in supporting trauma governance via Bayesian Network mortality prediction.



Col Nigel Tai MS FRCS

Consultant Trauma & Vascular Surgeon

Clinical Senior Lecturer in Trauma Sciences; Queen Mary, University of London & The Royal London Hospital

Sponsors

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The committee would like to sincerely thank the ***Worshipful Company of Barbers*** for bestowing upon us the honour of being able to award the prize for the best podium presentation of the meeting as the **Thomas Vicary Prize**, and for funding the prize itself



THE WORSHIPFUL COMPANY OF BARBERS

We continue to be extremely grateful to the ***Maidstone & Tunbridge Wells Academic Surgical Fund*** for the financial support in running this event and in particular for funding the prizes in the Research & Audit, Case Report and Poster categories

Maidstone and
Tunbridge Wells 
NHS Foundation Trust

Finally, the committee would like to thank ***Ethicon*** who have returned as a major sponsor for this year

Please visit their trade stand during the coffee and lunch breaks

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Prizes



The Thomas Vicary Prize

The Thomas Vicary Prize is awarded to the best presentation of the meeting in the Research & Audit category and is generously provided and supported by the **Worshipful Company of Barbers**. The prize is £500, to be used as payment or part payment for any educational course or conference attendance that the awardee desires necessary for the advancement of their surgical training.

Thomas Vicary was born about 1495. In Manningham's Diary he is described as being first "*...a meane practiser in Maidstone*" until "*...the King [Henry VIII] advanced him for curing his sore legge.*" This took place about 1525 when the King was passing through Maidstone, and the successful treatment so pleased the King that Vicary was "advanced" to the position of Junior Warden of the Barber Surgeons' Company, and in 1626 was receiving £20 a year as the King's Surgeon.

At that time, barbers officiated as surgeons, especially for the phlebotomy operations which were then so frequently done. The well-known staff or "barber's pole" which is often seen outside a barber's door commemorates this, as it was customary for the patient about to be bled to hold a staff at arm's length in order to make the blood flow more freely during the operation. The red colour on the pole denoted blood, and the white spiral the bandages. A cup at the top of the pole represented a cupping-glass, and at a later date, when its significance was forgotten, a representation of an acorn was added to give it a more finished appearance, and probably also to act as a charm against damage by lightning.

In the Liber Alhus, p. 236, the following regulation appears: "*...And that no barbers shall be so bold or so daring, as to put blood in their windows openly or in view of folks but let them have it carried privily unto the Thames, under pain of paying two shillings unto the use of the Sheriffs.*"

By a grant dated April, 1530 (21-22 Henry VIII), Vicary was made Sergeant of the King's Surgeons, and chief Surgeon to the King, with allowances when attending the King's household, and of wine, etc., for cures, his salary then being 40 marks, or £26 13s. 4d. a year. He held this position under Henry VIII, Edward VI, Queen Mary and Queen Elizabeth until his death in 1561 or 1562.

As the head of his profession, Vicary was appointed in 1541 first Master of the newly amalgamated Companies of Barbers and Surgeons, and a picture by Holbein (see below) now in the possession of the Barbers' Company, shows Vicary, in the company of other Surgeons, Barbers, and Physicians, receiving the Charter of the Company from the King.

In the same year Vicary published his book, *A profitable Treatise of the Anatomie of Mans Body*, which is thought by some to be based on a transcript of a fourteenth century manuscript. which was taken from still earlier medieval authorities. It probably contains some original research, however, as in 1540 Vicary,

with other Surgeons, requested the Sheriffs of London to allow all those hanged at Tyburn to be given up for dissection. Some thirty years before the discovery of the circulation of the blood by William Harvey, Vicary writes : *"I fynde that Arteirs have two cotes as one cote is not sufficient nor able to withstande the violent moving and steering of the spirite of lyfe that is caryed in them."* He does not, however, give away all his knowledge, for his book ends *"And this sufficeth for young Practitioners"*.

Vicary's book was the first to be published in English on Anatomy, and a reprint of this, in black-letter, by the Surgeons of St. Bartholomew's Hospital, is included in *The Englishmans Treasure* of 1633, a copy of which has been recently acquired by the Maidstone Museum.

Excerpt from Archaeologica Cantiana, Vol. 62 1949



The Josiah Rampley Prize

The Rampley Prize is awarded to the best presentation of the meeting in the Case Report category and is generously provided and supported by the ***Academic Fund at Maidstone & Tunbridge Wells Hospitals***. The prize value is £100 and is awarded in memory of Josiah Rampley, Surgical Beadle and probably the most famous hospital beadle of them all. He was often referred to as *'the Grand Old Man of the London Hospital'*, where he was associated with their theatre from 1871 until at least 1900.

Nowadays he is probably most commonly remembered for the eponymous *'Rampley's sponge-holding forceps'*, along with being the great, great-uncle of the KSS Surgical Symposium Lead!

The Best Poster Prize

The Best Poster Prize is awarded to the best poster presentation of the meeting and is generously provided and supported by the ***Academic Fund at Maidstone & Tunbridge Wells Hospitals***. The prize value is £100.

Case Report Abstracts

Timings are tight and you will not be permitted to go over time. Presentations last 6 minutes with 3 minutes for questions.

*The Best Case Report of the session, as judged by the panel, will be awarded the **Rampley Prize***

10:15 – 10:23	CR4-01: Management of internal mammary lymph nodes (IMLN) in breast cancer – a case series <i>Mr Amit Sharma; Maidstone & Tunbridge Wells</i>
10:23 – 10:31	CR4-02: Fournier’s gangrene secondary to open mesh repair of inguinal hernia <i>Miss Duaa Gumaa; East Kent Hospitals</i>
10:31 – 10:39	CR4-03: A rare presentation of rectal cancer metastasis as a cheek lesion <i>Mr Ahmed Saad; East Sussex Healthcare</i>
10:39 – 10:47	CR4-08: Management of a patient with ischaemic, perforated small bowel secondary to non-occlusive mesenteric ischaemia between two sites in a trust <i>Miss Radhika Merh; East Kent Hospitals</i>
10:47 – 10:55	CR4-05: Amyand’s hernia in recurrence of inguinal hernia <i>Mr Kevin Beatson; Darent Valley Hospital</i>
10:55 – 11:03	CR4-06: Recurrent pyoderma gangrenosum following breast surgery <i>Miss Jade Zhao; Frimley Park Hospital</i>
11:03 – 11:11	CR4-07: Diaphragm disease of the small bowel <i>Mr Rakesh Koshy; East Kent Hospitals</i>
11:11 – 11:19	CR4-04: Extramammary Paget’s Disease of the axilla <i>Miss Alicia Skervin; St Richard’s Hospital, Chichester</i>

Thomas Vicary Prize Abstracts

Timings are tight and you will not be permitted to go over time. Presentations last 8 minutes with 3 minutes for questions.

*The best Research & Audit presentation as judged by the panel will be awarded the **Thomas Vicary Prize**, with a runner-up prize of £100*

Session 1

- | | |
|----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 12:05 – 12:16 | RA4-03: The impact of antiplatelet drugs and anticoagulants on results of the Faecal Immunochemical Test and its efficacy in detecting colorectal cancer
<i>Mr Aftab Khan</i>
<i>East Sussex Healthcare NHS Trust</i> |
| 12:17 – 12:28 | RA4-01: Discovering novel treatments for acute traumatic bleeding
<i>Mr Anthony Thaventhiran</i>
<i>OOPR: Barts and The Royal London Hospitals, Queen Mary University of London</i>
<i>Centre for Trauma Sciences</i> |
| 12:29 – 12:40 | RA4-41: Gut microbiome – host interactions following bariatric surgery
<i>Mr Nicholas Penney</i>
<i>Frimley Park Hospital</i> |
| 12:41 – 12:52 | RA4-12: Radiofrequency ablation for haemorrhoidal disease: a safe and effective treatment modality
<i>Mr Mohammed Eddama</i>
<i>East Kent Hospitals University NHS Foundation Trust</i> |
| 12:53 – 13:04 | RA4-32: ARTISS (Fibrin Sealant Spray): Day-case Drain-less Mastectomy
<i>Mr Kasra Razi</i>
<i>East Sussex Healthcare NHS Trust</i> |
| 13:05 – 13:16 | RA4-19: Emergency malignant small bowel obstruction
<i>Mr Mohammed Khalil</i>
<i>Maidstone & Tunbridge Wells NHS Trust</i> |

RA4-03: The impact of antiplatelet drugs and anticoagulants on results of the Faecal Immunochemical Test (FIT) and its efficacy in detecting colorectal cancer

Mr Aftab Khan

East Sussex Healthcare NHS Trust

Aims

To investigate the impact of blood platelet and clotting inhibitors (BPCI) on faecal immunochemical test (FIT).

Methods

Prospective data was collected from patients investigated for colorectal cancer (CRC) using FIT and conventional investigations (optical or virtual colonoscopy). Sensitivity, Specificity and AUC values of FIT in detecting CRC were analysed in patients on regular BPCI compared to controls. A threshold value of ≥ 10 mcg Hb/g faeces on FIT was set as a positive result.

Results

757 patients (M:F 1:2; median age 71, IQR 63-80) were included. The number of patients on antiplatelet drugs was 123 (16.2%; Aspirin=85 (11.2%), Clopidogrel=35 (4.6%), Dipyridamole=2 (0.3%) and on anticoagulants was 95 (12.5%; Warfarin=41 (5.4%), Apixaban=17 (2.2%), Rivaroxaban=28 (3.7%). Patients on Rivaroxaban had higher FIT values (83.9 vs 26.9mcg Hb/g of faeces, p 0.001) but no difference in detection rate of CRC (7.1% vs 5.1%, p 0.65). Sensitivity, Specificity and AUC values of FIT for detecting CRC in controls were 82%, 85.7% and 0.89 respectively. Patients taking Clopidogrel had significantly higher Sensitivity, Specificity and AUC compared to controls (100%, 55% and 1, p 0.003). There was no difference in these values between controls and patients taking 'any antiplatelet drug' (100%, 83.6% and 0.97, p 0.08) 'any anticoagulant' (100%, 31% and 0.89, p 0.9), or those on any individual drug.

Conclusions

Patients taking rivaroxaban had higher FIT values but no difference in detection rates of CRC. Overall, we did not find any significant impact of BPCI on FIT in detecting CRC.

RA4-01: Discovering novel treatments for acute traumatic bleeding

Mr Anthony Thaventhiran

OOPR: Barts and The Royal London Hospitals, Queen Mary University of London Centre for Trauma Sciences

Background

Approximately 17,000 people in the UK die from injury each year, and uncontrolled bleeding is the most significant cause of death. This can be due to a failure of blood-clotting or blood clots breaking-down too quickly.

Current treatment of Acute Traumatic Coagulopathy (ATC) remains largely supportive, including: surgical control of bleeding; transfusion of blood and clotting products to promote coagulation; and antifibrinolytic drugs to prevent premature clot breakdown.

The combination of widespread tissue injury and systemic haemorrhagic shock activates the endothelium and increases activated Protein C (aPC). aPC cleaves clotting Factors V and VIII, which are critical to the production of a mature blood clot, and binds to plasminogen activator inhibitor, removing inhibitory control on fibrinolysis.

Methods

To investigate this, the Centre for Trauma Sciences has developed a reproducible murine ATC model that combines pressure-controlled haemorrhage and replicable tissue injury.

Results

I have validated the ATC model and tested modulation of aPC action using human Fibrinogen (hFI) and recombinant human Factor Va (rhFVa) resistant to aPC inactivation. In both cases preliminary findings have shown there to be a statistically significant difference in Mean Arterial Pressure and in survivability compared to animals treated with vehicle alone. With hFI an almost normal return to baseline rotational thromboelastometry was observed.

Conclusions

Mice who received rhFVa and hFI had lower terminal lactates, indicating improved systemic perfusion from potentially supporting coagulation and optimising resuscitation. Further testing is required to look for evidence of reduced fibrinolysis.

RA4-41: Gut microbiome – host interactions following bariatric surgery

*Mr Nicholas Penney
Frimley Park Hospital*

Introduction

Bariatric surgery has emerged as a highly successful treatment for type-2 diabetes (T2D) in obese patients. The metabolic outcomes are achieved through both weight-dependent and interestingly, weight-independent mechanisms. Indeed, many metabolic effects are seen before weight-loss has occurred. This is because bariatric surgery induces a complex systems-wide metabolic effect, including a functional modification of the gut microbiome.

Methods

I conducted a prospective observational study of 158 obese ($\text{BMI} > 30 \text{ kg/m}^2$) patients undergoing Roux-en-Y Gastric Bypass (RYGB) or Sleeve Gastrectomy (SG). Patients underwent longitudinal multi 'omics phenotyping pre, 3-months and 1-year post-surgery. Multiple analytical platforms were utilised for metabolic profiling including

^1H -NMR spectroscopy and mass-spectrometry. Gut microbiome analysis was performed using next-generation metagenomic sequencing. After data pre-processing, univariate and multivariate statistical techniques were employed.

Results

As expected, the intense physiological disruption induced after both procedures results in gross changes to body morphology, glycaemic control, metabolic and gut microbiome profiles. RYGB results in greater microbial changes than VSG, characterised by a shift in the colonic bacteria towards those usually found in higher concentrations in the small bowel. A number of novel associations are found between altered gut microbiota and important host signalling metabolites such as bile acids, short-chain fatty acids and amino acids.

Conclusion

These results suggest that changes to gut microbes after bariatric surgery have a direct influence on host metabolism, including glycaemic control. Further understanding of this area could enable adjuncts to enhance bariatric surgery outcomes or indeed development of non-surgical therapies for weight-loss and T2D, such as next-generation targeted probiotics.

RA4-12: Radiofrequency ablation for haemorrhoidal disease: a safe and effective treatment modality (including video demonstration of technique)

*Mr Mohammed Eddama
East Kent Hospitals University NHS Foundation Trust*

Introduction

Radiofrequency ablation (RFA) for the treatment of Haemorrhoids disease (HD) is a new procedure the outcome of which is still unclear. We aim to assess the safety and effectiveness of RFA (Rafaelo®) for HD.

Methods

A total of 30 patients who underwent the Rafaelo® procedure were recruited. Under sedation a specially designed Rafaelo® device and associated HPR45i probe were used to deploy RFA (4MHz-frequency) to the haemorrhoidal tissue.

Results

The mean age was 46 years ($\text{SD}=13$), 20 (67%) males and 10 (33%) females. The mean BMI was 25 ($\text{SD}=4$). The predominant symptom of all patients was per-rectal bleeding. Post-operative pain scores on a scale of 0 to 10 were 0, 2 ($\text{SD}=2$), 1 ($\text{SD}=2$), and 0 on immediate, day-1, day-3 and 2-months follow-up. The mean satisfactory score was 9 ($\text{SD}=1.5$) out of 10 on 2-months follow-up.

Patients return to normal daily activity was average of 3 ($\text{SD}=1$) days following the procedure. Quality-of-life assessments including: Visual Analogue Score (before: mean=70, $\text{SD}=21$; after: mean=85, $\text{SD}=16$; $p=0.02$) and EQ-5D-5L (before: mean=0.84, $\text{SD}=0.15$; after: mean=0.94, $\text{SD}=0.13$; $p=0.04$) were significantly improved. Average follow up for recurrence of symptoms was 18 months (range=6-32). One patient (4%) reported the recurrence of per-rectal bleeding after 12 months of the procedure.

Conclusion

Rafaelo® procedure for the treatment of HD is safe, and effective with minimal post-operative pain.

RA4-32: ARTISS (Fibrin Sealant Spray): Day-case Drain-less Mastectomy

Mr Kasra Razi

East Sussex Healthcare NHS Trust

Introduction

The use of drains in breast surgery is steadily decreasing, and various methods of reducing the dead space after mastectomy have been described such as quilting of flaps and use of anticoagulant sprays. We conducted a feasibility study of using a fibrin sealant spray (ARTISS) instead of drains in cases of mastectomy without reconstruction, and prospectively audited the concomitant length of stay (LOS) & post-operative complications.

Methodology

A consecutive series of 34 patients, irrespective of age, BMI, social demographics & co-morbidities were included in the study. All surgical & theatre staff received appropriate training and a standardised technique was employed with 4mls spray volume & 3 minutes flap pressure time using a shot clock.

Results

The mean age was 66.8 years, ranging from 50-87. Average BMI was 27.32kg/m², ranging from 19 to 42. Mastectomy specimen weights ranged from 195 to 1472 gms. We achieved a day-case rate of 41% (14/34), of which 3 developed seromas requiring aspiration & one was re-admitted 7 days later with a haematoma requiring evacuation. Of the 20 delayed discharges, 11 were due to patient choice (of which 6 had an axillary drain after ALND), 1 due to post-operative nausea/vomiting, 1 due to blue dye reaction and 1 cardiac complication.

Conclusion

We have demonstrated that drain-free mastectomy is possible using ARTISS & that it facilitates early discharge in all demographic groups. Our next step is to omit the axillary drain after ALND & continue this study to obtain larger numbers.

RA4-19: Emergency malignant small bowel obstruction

Mr Mohammed Khalil

Maidstone & Tunbridge Wells NHS Trust

Aim

To investigate the outcomes of malignant small bowel obstruction

Methods

Prospective, single centre, observational study on consecutive patients presenting acutely with malignant small obstruction

Results

A total of 176 patients, The median age was 65 years. 30% patients were managed conservatively, 70% operatively. The total length of stay was 10-20 days, readmission and complications rates for patients managed conservatively was less than 5% (palliative pathway), 20-30% of those managed operatively were admitted (due to adhesions BO/recurrence). 10- 20% were put on the palliative pathway from the time of diagnosis

Conclusion

In conclusion, acute bowel obstruction caused by a malignant tumours had a good prognosis and five year survival, less than 5% had residual cancer or recurrence.

Thomas Vicary Prize Abstracts

Session 2

- 15:15 – 15:26** **RA4-24: Pedicled perforator flaps (LICAP, MICAP) are safe and economical alternatives to mastectomy and complex reconstruction in a select group of patients**
Miss Radhika Merh
East Kent Hospitals University NHS Foundation Trust
- 15:27 – 15:38** **RA4-28: Dysregulation of HOX/PBX genes in colorectal liver metastases: A molecular and bioinformatic analysis**
Miss Eirini Martinou
Royal Surrey County Hospital
- 15:39 – 15:50** **RA4-30: Role of Laparostomy & negative pressure wound therapy in patients who underwent emergency laparotomy**
Miss Duaa Gumaa
East Kent Hospitals University NHS Foundation Trust
- 15:51 – 16:02** **RA4-21: Anti-muscarinic drugs increase rectal compliance and exacerbate constipation in chronic spinal cord injury**
Mr Giuseppe Preziosi
East Kent Hospitals University NHS Foundation Trust
- 16:03 – 16:14** **RA4-05: Exploring the concept of Surgical Intuition through Social media #Surgicalintuition #SoMe4Surgery**
Mr Constantine Halkias
Maidstone & Tunbridge Wells NHS Trust
- 16:15 – 16:26** **RA4-08: Sigmoid volvulus: do we manage it properly?**
Mr Rakesh Koshy
East Kent Hospitals University NHS Foundation Trust

RA4-24: Pedicled perforator flaps (LICAP, MICAP) are safe and economical alternatives to mastectomy and complex reconstruction in a select group of patients

Miss Radhika Merh

East Kent Hospitals University NHS Foundation Trust

Introduction

Pedicled perforator flaps, such as the lateral intercostal artery perforator (LICAP) and medial intercostal artery perforator (MICAP) flaps, allow volume replacement using autologous tissue in breast conservation surgery (BCS), avoiding complex reconstruction surgery. Here we analyse initial outcomes and cost savings made in a district general hospital for patients undergoing either technique as part of their oncoplastic breast treatment.

Methods

A prospectively completed database was searched between 01/10/2016 to 31/08/2018 for patients who had either LICAP or MICAP flap in immediate sitting following BCS by two oncoplastic breast surgeons in the same unit. Patients were typically followed up at 2 weeks post-surgery with results of the operative histopathology. We reviewed length of stay (LOS), early post-operative outcomes and short-term financial implications.

Results

52 patients met the inclusion criteria. Mean LOS was 1 day; there was no flap necrosis observed. Post-operative histology showed 6 patients had positive tumour margin (11.5%); 2 of 6 underwent total mastectomy and 4 of 6 had re-excision of margin, with the flap intact. For 46 patients (88.5%) who did not require a second operation, a mean relative saving of £3300 per case was made, due to no mesh or drains and shorter LOS when directly compared to implant- and mesh-based reconstruction.

Conclusion

LICAP and MICAP flap techniques in BCS are technically feasible with minimal donor site morbidity, early post-operative recovery, excellent cosmetic outcome and good graft reliability. Additionally, they are more cost-effective when compared to complex breast reconstruction. Further long-term follow-up data is required.

RA4-28: Dysregulation of HOX/PBX genes in colorectal liver metastases: A molecular and bioinformatic analysis

Miss Eirini Martinou

Royal Surrey County Hospital

Introduction

HOX genes (n=39) are a family of homeodomain-containing transcription factors which play a pivotal role in embryonic development. They have been found to be dysregulated in various types of cancer and may affect survival. Their expression profile and prognostic role in colorectal liver metastases (CRLM) has not been investigated to date. The aim of this novel study is to determine the dysregulation of HOX genes along with their co-factors (Pre-B-Cell-Leukemia Homeobox; PBX) in CRLM.

Methods

Formalin-fixed-paraffin-embedded specimens from patients who underwent liver resection for CRLM between 2007 and 2014 (n=210) by a single surgeon were obtained. RNA extraction was performed followed by Quantitative reverse transcription PCR (RT-qPCR). Relative gene expression was quantified using the Livak method. Bioinformatic analysis for gene expression and survival was conducted using Oncomine, GEPIA and Tissue Cancer Genome Atlas Database.

Results

Analysis of 20 matched metastatic colorectal cancer and normal liver tissue samples showed dysregulation in 23/39 HOX and in all PBX genes. Significant upregulation was seen in HOX A10, A11, B6, B7, B8, B9, C4, D1, D9 and in PBX4 (p<0.05). PBX3 was the only gene that demonstrated significant downregulation in cancerous metastatic tissue. Bioinformatic analysis showed similar dysregulation of the above genes between primary colorectal cancer and normal colon. Overexpression of HOXC4, PBX3 and PBX4 were significantly associated with worse survival rates.

Conclusions

HOX/PBX genes are highly dysregulated in primary and metastatic colorectal cancer. This dysregulation may play an important role in carcinogenesis, metastasis. HOX/PBX genes may be used as potential therapeutic targets.

RA4-30: Role of Laparostomy & negative pressure wound therapy in patients who underwent emergency laparotomy

Miss Duaa Gumaa

East Kent Hospitals University NHS Foundation Trust

Aims

To monitor the role of negative pressure wound therapy in the management of open abdomen.

Methods

Retrospective study covering all patients who underwent laparostomy in The John Radcliffe Hospital, Oxford over 30 months.

Results

51 patients underwent laparostomy. The average length of stay in hospital was 17 days. The most common indication for laparostomy was bowel ischemia and abdominal contamination. All patients were admitted to ITU post operatively. Temporary abdominal coverage was achieved by Abthera™ vac dressing in 100% of patients. Average number of operations before definitive abdominal closure was 2.6 with maximum of 10 operations and minimum of 2 operations, with average wait of 5 days. 78.4% of patients had primary fascial closure and mesh-mediated fascial traction, and 6% had closure with Vicryl™ mesh, 5% of the patients died before abdominal closure. The patients were followed up for at least 2 years, 14% of patients developed incisional hernia, and 2% required abdominal wall reconstruction. The incidence of incisional hernia was lowest with primary closure, 20% of patients who had primary closure developed incisional hernia. And it was the highest after closure with Vicryl™ mesh, 33% of patients had incisional hernia. None of the patients developed bowel fistula. 90 days mortality rate was 17.6%. The cause of death in 4% of them was not related to the initial surgery.

Conclusions

Negative pressure wound therapy is very effective in the management of catastrophic abdomen; also, early and primary closure is associated with less complications.

RA4-21: Anti-muscarinic drugs increase rectal compliance and exacerbate constipation in chronic spinal cord injury

Mr Giuseppe Preziosi

East Kent Hospitals University NHS Foundation Trust

Objectives

We hypothesized that anti-muscarinic agents alter rectal compliance in Spinal Cord Injury (SCI) patients and that altered rectal compliance relates to bowel symptomatology. Primary aim was to compare rectal compliance before and after the institution of anti-muscarinics and an adrenoceptor agonist (mirabegron) in these patients. Additionally, we wanted to evaluate if anorectal manometry differed before and after use of anti-muscarinic agents.

Methods

Thirty-five patients with supraconal SCI underwent anal manometry, assessment of recto-anal inhibitory reflex (RAIR) and rectal compliance before and after treatment (for overactive bladder) was started (mean follow-up 12 weeks). Patients were assessed pre- and post-treatment (solifenacin n = 17, tolterodine n = 10, mirabegron n = 8).

Results

After anti-muscarinic treatment, resting, squeeze and cough pressures were unchanged, but rectal compliance was significantly raised [19.0 (8.9 – 29.7) vs 23.6 (15.9 – 31) ml/mmHg, p = 0.001]. The percent amplitude of maximal sphincter relaxation of the RAIR was decreased (p < 0.001) and excitation latency was increased (p = 0.006). There was a significant increase of the Wexner-Constipation Score [11 (8 – 16.5) vs 19 (13.5 – 25), p = 0.001] but no change in the Wexner-Incontinence Score. There was a significant correlation between change in rectal compliance and change in Wexner Constipation Score (p = 0.001). There were no changes in those who received mirabegron.

Conclusions

Anti-muscarinic therapy increases compliance of the neurogenic rectum and alters anorectal reflex activity, with worsening of constipation. These alterations are not observed with mirabegron.

RA4-05: Exploring the concept of Surgical Intuition through Social media #Surgicalintuition #SoMe4Surgery

Mr Constantine Halkias

Maidstone & Tunbridge Wells NHS Trust

Background

Intuition is the ability to instinctively understand something without need for conscious reasoning. In the context of surgery this is an abstract concept which may rely on a multitude of factors. This study investigated factors underpinning surgical intuition using social media platform Twitter to host real- time discussions worldwide.

Methods

#SoMe4Surgery is an umbrella hashtag of surgical topics. #Surgicalintuition was used between August- September 2018 to debate surgical decision making and judgement. Tweets were curated and analysed on the basis of aforementioned hashtags. Data were extracted using NodeXL (individual tweets, retweets, interactions between tweeters) and aggregate data from Followthehashtag.com (FTH).

Results

Data from 547 tweets (64 original tweets, 117 replies, 366 retweets, 126 contributors, 28 countries) were analysed. FTH estimated an audience of 423,838 from 3,475,661 impressions. Users included surgeons, physicians, other health care providers, patients and the public; 87.4% were male. The average contributor had 3391 followers. The Wordle tool identified experience, knowledge, algorithm, pattern recognition, non-technical algorithms, subconscious and openness as words most commonly used. The most common theme was combination of knowledge, experience and pattern recognition in surgical decision making.

Conclusions

Healthcare related hashtags connect surgeons and members of the public despite geographical, gender and background differences. Online debate may improve understanding of difficult but important concepts such as surgical intuition, which do not lend themselves to conventional analysis.

RA4-08: Sigmoid volvulus: do we manage it properly?

Mr Rakesh Koshy

East Kent Hospitals University NHS Foundation Trust

Introduction

Patients with sigmoid volvulus have high risk of recurrence. This makes them liable for risk of increased morbidity and mortality secondary to ischaemic changes. The aim of this study is to detect whether patients who presented with sigmoid volvulus were offered definitive treatment after initial resuscitation, according to guidelines.

Methods

Retrospective audit included all patients admitted with sigmoid volvulus between 2016 and 2018. We analysed the initial management in the emergency setting and the main outcome was whether a definitive treatment was offered and the associated results.

Results

49 patients presented with sigmoid volvulus during that period with total of 145 admissions. 36 patients (73.4%) had recurrent admission (range 2-8 admissions). Age range was 37 to 99, 32 were males. 2 patients were managed by urgent Hartman's procedure following unsuccessful endoscopic reduction, 2 patients were managed electively after successful decompression; one underwent sigmoid colectomy and the other underwent sigmoido-pxy, 10 patients had surgical treatment done after multiple recurrences; 2 were managed by laparoscopic sigmoid colectomy, 7 were managed by open sigmoid colectomy and the other two were managed by Hartman's procedure. Surgery was offered, but not performed for 14 patients due to being unfit or patients declining surgery. 20 patients were not offered surgery. The mortality rate among patients who underwent surgery was 20% compared to 52.9% among those who have not undergone surgical intervention.

Conclusions

Patients with sigmoid volvulus should be considered for definitive surgery after initial endoscopic decompression to avoid risk of recurrence and subsequent complications.

Poster Hall

*Poster presenters are encouraged to remain in the vicinity of their posters during the breaks to take questions from the panel and fellow trainees. The best Poster Presentation as judged by the panel will be awarded the **Best Poster Prize**.*

P4-01: Male breast cancer – time to offer male breast conservation or reconstruction?

Miss Stacy Wardle

St Richard's Hospital, Chichester

P4-02: Delays in emergency laparotomy due to limited radiology services at night

Mr Aftab Khan

Royal Sussex County Hospital, Brighton

P4-03: Management of iron-deficiency anaemia at East Sussex Healthcare NHS Trust

Dr Artemesia Lango

East Sussex Healthcare NHS Trust

P4-04: A Trust-wide breast abscess management and referral pathway

Miss Radhika Merh

East Kent Hospitals University NHS Foundation Trust

P4-05: Meta-analysis of randomized control trials looking at the role of 5-ASA in the prevention of recurrent symptoms resulting from diverticular disease

Miss Victoria Pegna

Brighton & Sussex University Hospitals NHS Trust

P4-06: The prognostic role of resection margin after liver resection in patients with colorectal liver metastases: a 10-year study

Miss Eirini Martinou

Royal Surrey County Hospital, Guildford

P4-07: The diagnostic accuracy of faecal immunochemical testing for detecting colorectal cancers in symptomatic patients

Mr Aftab Khan

East Sussex Healthcare NHS Trust

P4-08: Optimising the identification of acute patient deterioration and sepsis through wearable sensors and digital alerting

Miss Meera Joshi

Imperial College London (OOPR)

P4-09: An audit of surgical management of patients with acute biliary pancreatitis

Mr Amit Sharma

East Kent Hospitals University NHS Foundation Trust

P4-10: The rate of surgical recurrence after first bowel resection for Crohn's disease in a UK district general hospital

Mr Mohammad Eddama

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P4-11: Clinical audit of the timelines of surgical management for acute cholecystitis in adults in a District General Hospital in the United Kingdom

Mr Pierre Montauban

East Kent Hospitals University NHS Foundation Trust

P4-12: The effect of obesity on outcomes following colorectal surgery

Mr Peter How

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