



# West Midlands Surgical Society

***Spring Meeting***

***The Manor Hospital,***

***Walsall***

***Friday 20<sup>th</sup> May 2016***



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**WEST MIDLANDS SURGICAL SOCIETY SPRING MEETING**

**FRIDAY 20<sup>TH</sup> MAY 2016 AT WALSALL MANOR HOSPITAL**

# Programme

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09.00      **REGISTRATION AND COFFEE**

09.30      **WELCOME**

*Prof Chris Imray – President WMSS*

## Scientific Short Papers

09.35      ***A Pre-operative Tool To Predict Functional Outcomes Following Radical Prostatectomy***

G Lingham(1), R Bryan(2), D Parashar(3), A Doherty(4)  
Medical Student, University of Birmingham Medical School(1), Senior Research Fellow, Institute of Cancer & Genomic Sciences, University Hospital Birmingham (2)Statistician, University of Warwick(3), Queen Elizabeth Hospital (4)

09.44      ***Are We Able To Meet 7-day Standards For Consultant Review Times In A Major Tertiary Referral Centre?***

J Bechar, U Shariff, S Bradley, M Tokhi, R Belchita, M Mummadi, V Garimella  
Royal Stoke University Hospital

09.53      ***Can We Improve Groin Hernia Referral and Expedite Appropriate Care In High Risk Groups?***

M Elkwafi(1), A Brookes(2), R Adat (2), C Macano(2)  
Keele University Medical School(1), University Hospital of North Midlands(2)

10.02      ***Colorectal Cancer – What Happens If We Don't Operate? A Study of 437 Patients***

N Iqbal, J Ward, U Shariff, H Youssef  
Good Hope Hospital

10.11      ***Breast One-Stop Clinic: Concordance Between Primary and Secondary Care***

S Jafferbhoy, M Tandon, R Kirby, S Narayanan, S Soumian  
Royal Stoke Hospital

- 10.20 ***Comparison Of Outcomes Following Infra-Popliteal Endovascular Intervention In The BASIL-1 Trial (1999-2004) and In A Contemporary Series (2009-2013)***  
M Popplewell(1), H Davies(1), M Renton(2), G Bate(1), S Patel(3), Professor A Bradbury(1)  
University of Birmingham Dept of Vascular Surgery (1), Heart of England Foundation Trust(2), Birmingham Clinical Trials Unit(3)
- 10.29 ***Comparison of Outcomes Of Patients With and Without Type II Diabetes Before 2 and 8 Weeks After Sleeve Gastrectomy and Its Relation to Weight Loss at 26 Weeks***  
J Abraham, N Shah, A Rabiou, T Barber, S Kumar, V Menon, M K Piya  
University Hospital Coventry & Warwick
- 10.38 ***High Troponin Levels In Post-operative Elective Vascular Patients Correlate With Adverse Post-operative Outcomes***  
T Sillo, M Ahmad, R Pierson, H Becker, A Garnham, M Wall  
Black Country Vascular Network, Russell's Hall Hospital
- 10.47 ***Effect Of Cold Ischaemia Time On Outcome After Living Donor Renal Transplantation***  
S Canbilen(4), J Nath(1), J Hodson(3), N G Inston(1), A Sharif(2), A R Ready(1)  
Dept. Of Renal Surgery(1), Medicine(2) & Biostatistics(3), 3<sup>rd</sup> year medical student(4),  
University of Birmingham
- 10.56 ***Multidisciplinary Meetings: Should All Patients Be Discussed?***  
S Jafferbhoy, R M Kirby, S Narayanan, S Soumian  
Royal Stoke Hospital
- 11.05 **MORNING COFFEE**  
*Plus visit to trade stands*
- 11.30 ***Modelling A Major Incident In The West Midlands Region***  
A Beaven, M J Midwinter  
Queen Elizabeth Hospital
- 11.39 ***Conversion Of Colonoscopy To Flexible Sigmoidoscopy: An Audit and Re-audit Of Practice***  
A Barrow(1), L Rickard(1), C Thompson(1), S Radley(1), R Walt(2), T Ismail(1), S T Ward(1)  
Dept of Colorectal Surgery(1) & Dept of Gastroenterology(2), University Hospitals Birmingham NHS Foundation Trust
- 11.48 ***Non-reversal Of Defunctioning Ileostomy In Low Anterior Resection For Rectal Cancer***  
T Lees(3), G Swindall(3), S Karandikar(2), S Radley(1), I Geh(1,2)  
Queen Elizabeth Hospital(1), Heartlands Hospital(2) University of Birmingham Medical School(3)

- 11.57      ***Post Cholecystectomy Diarrhoea: Current Consenting Practice Needs Real Change***  
A Hussain, M Verzune, M S Azhar, M A Khan  
University Hospital of North Midlands
- 12.06      ***Pre and Post-operative Hypomagnasaemia Is Common and Associated With Adverse Outcomes After Major Elective Vascular Surgery***  
T Sillo, M Ahmad, H Becker, A Garnham, M Wall  
Black Country Vascular Network, Russell's Hall Hospital
- 12.15      ***Pre-operative Treatment and Pathological Stratification As A Determinate Of Outcome After Curative Rectal Cancer Surgery***  
A Bhangu, S Radley, S Karandikar, I Geh  
University Hospital Birmingham, Heartlands Hospital
- 12.24      ***Surgical Review Clinic: Does The Ambulatory Model Deliver Quality Care?***  
K Waite, J Ward, A Khaled, I Oluwasomidotun, J Warburton, H Youssef  
Good Hope Hospital
- 12.33      ***The identification and Validation of GRIN2D As A Novel Endothelial Target In Colorectal Cancer, and The Investigation Of Its Effect As A Therapeutic Tumour Vaccine***  
H J M Ferguson(1,2), J Wragg(1), R Bicknell(1), T Ismail(2)  
University of Birmingham(1), University Hospital Birmingham NHS Foundation Trust(2)
- 12.42      ***Surgical Management Of Angiosarcoma Of The Breast At A Tertiary Referral Centre***  
J K Singh, R Warner, A Desai, S Ford, D Gourevitch, M Hallissey  
University Hospitals Birmingham NHS Foundation Trust
- 12.51      ***Surgical Site Infection (SSI) Rates Post Major Colorectal Surgery Before and After The Introduction of 2% Alcoholic Chlorhexadine Skin Preparation***  
E Farrar, T Hardern, D Nepogodiev, T D Pinkney  
University Hospitals Birmingham NHS Foundation Trust
- 13.00      **LUNCH**  
*Plus visit to trade stands and posters*

14.00      **TRAINING UPDATE**  
*MR MIKE HALLISSEY*

## Symposium

14.15      **THE LEGAL FRAMEWORK OF 2-PART CONSENT AND HOW IT FITS WITH PRE-ASSESSMENT CORE OPTIMISATION**

MR DAVID LOCKE  
Solicitor-Advocate, Health Litigation Team, Hill Dickinson LLP, Liverpool

SISTER DEBRA ALLPORT  
Senior Sister. RN Dip HE. Bsc (Hons).  
OPD/Fracture clinic/Pre-op Assessment/MDCU, Division of surgery, Walsall Manor

15.45      **DISCUSSION**

16.15      **WEST MIDLANDS RESEARCH COLLABORATIVE**  
*WMRC Committee*

16.30      **TEA AND AWARD OF REGISTRARS' PRIZES**  
Please note prizes will not be awarded in absentia

DATE OF NEXT WMSS MEETING IS: FRIDAY 11<sup>TH</sup> NOVEMBER 2016, VENUE TBC

# ABSTRACTS:

## **A Pre-Operative Tool to Predict Functional Outcomes Following Radical Prostatectomy**

**Gita Lingam<sup>1</sup>, Richard Bryan<sup>2</sup>, Deepak Parashar<sup>3</sup>, Alan Doherty<sup>4</sup>**

**Background:** Despite the availability of recognized variables that could be used to predict functional outcomes following radical prostatectomy, a preoperative classification is not routinely used.

**Aim:** That by identification of a model group of patients it is possible to accurately inform patients of likely functional and oncological outcomes.

**Methods:** Patients were categorized into 3 groups; index, non-index and high risk based on a) urinary and sexual functional questionnaires b) D'Amico cancer risk groups and c) patient comorbidities and priorities. Questionnaires at 3 months and 1 year post-op were used to assess erectile function and incontinence.

**Results:** Overall irrespective of technique, functional and oncological outcomes at 1 year for the groups: Index, Non-Index and High Risk were as follows: Margin Negativity (%) 81.7, 76, 62.9; Erectile Function (sufficient for sexual intercourse) (%) 63.3, 20.2, 7.4; Continence (no pads or precautionary pad only) (%) 94, 32.3, 39 respectively.

**Conclusion:** Allocation of patients into risk groups results in large differences in functional outcomes. This is beneficial to patients as we can provide more accurate outcome expectations. For clinicians, reducing patient variables means they can better assess the influence of surgical skill and technique.

*1 Medical Student, University of Birmingham Medical School*

*2 Senior Research Fellow, Institute of Cancer and Genomic Sciences, University of Birmingham*

*3 Statistician, University of Warwick*

*4 Consultant Urologist, Queen Elizabeth Hospital, Birmingham*

**Are we able to meet 7-day standards for consultant review times in a major tertiary referral centre?**

**Bechar J, Shariff U, Bradley S, Tokhi M, Belchita R, Mummadi M, Garimella V**

**Royal Stoke University Hospital**

**University Hospital North Staffordshire**

**Stoke-on-Trent**

**ST4 6QG**

**Aims:**

Senior decision-making is a key determinant in appropriate surgical patient care. Following publication of “NHS Services, Seven Days a Week Forum Clinical Standards” with regards to standards on time to first consultant review within 14 hours, the audit aim was to evaluate if we are able to meet NHS 7-day standards for Consultant review times for emergency general surgical patients in our tertiary referral trauma hospital.

**Methods:**

A prospective audit was performed over a 14-day period between (01/12/15 – 14/12/15) using a proforma to collect data for all admitted emergency general surgical patients to the Surgical Admissions Unit (SAU).

**Results:**

212 patients were admitted during the study period. Early Warning Score was established at the time of admission for all patients (100%). 90% of patients received surgical review once on SAU within six hours. 92% of patients with mortality >10% were reviewed within an hour of admission. 32% of patients were seen by a consultant within 14 hours of arrival.

**Conclusions:**

Prompt senior review and appropriate decision-making seven days a week is an important aspect of patient clinical outcomes. Results from our hospital suggest that timely senior review can be improved and will be re-audited in the near future.

## Can we improve groin hernia referral and expedite appropriate care in high risk groups?

M.Elkwafi<sup>1</sup>, A.Brookes<sup>2</sup>, R Adat, C.Macano<sup>2</sup>.

<sup>1</sup> Keele University Medical School.

<sup>2</sup> Dept. of General Surgery, University Hospital of the North Midlands NHS Trust.

**Aim:** In 2013 the ASGBI published Groin Hernia Guidelines. This study investigated whether these improved referral quality and identified which patients should be seen urgently, and ascertain if obtaining imaging caused delays.

**Method:** 3 GP practices' hernia groin referrals to secondary care, from May 2013 – November 2015 were reviewed retrospectively. Patients' records were reviewed for demographics, hernia type, unilateral/bilateral, recurrence, referral urgency, ASA and prior imaging. Compliance with guidelines was recorded.

**Results:** 112 patients, 7 female, 105 male, age range 22-88 years (median 65). ASA 1-34, 2-51, 3-23, 4-4. 12 urgent referrals, 88 routine, 11 not referred, 1 private referral. Only 62.5% (70 of 112) of referrals were appropriate. 21% underwent ultrasonography prior to referral. 8 patients with irreducible symptomatic hernias were referred routinely rather than urgently.

**Conclusion:** This study demonstrates that the presence of guidelines for primary care is insufficient as a significant number of referrals were inappropriate, potentially impinging on limited secondary care resources. There was a failure to identify patients at risk and expedite referrals. Imaging prior to referral caused unnecessary delays. The existing guidelines need to be implemented more rigorously. Delivering an educational program to support these may improve compliance and therefore improve groin hernia management.

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**N Iqbal, J Ward, U Shariff, H Youssef**

**Good Hope Hospital, Heart of England NHS Foundation Trust**

**Colorectal Cancer – What happens if you don't operate? A Study of 437 patients**

**Introduction:** Surgical resection is the most effective treatment for colorectal cancer (CRC). However some patients don't have surgery for various reasons. The aim of this study was to investigate the reasons for non-operative management of CRC and survival outcomes.

**Method:** A retrospective review was carried out for all patients diagnosed with CRC in a single NHS trust between January 2010 and October 2014. Data on demographics, co-morbidities, cancer site, reason for non-operative management and survival were collected.

**Results:** Of 2095 patients diagnosed with CRC, 437 underwent non-operative management (59% Male 41% Female; Median Age 79 (21-99 years). Reasons for not operating included patient refusal (10%), unfit (29.5%) and advanced disease (62.7%). Median overall survival was 6.5 months, which varied according to ASA grade (18.1m, 9.9m, 5.3m, 1.9m for ASA 1-4 respectively). Median survival for rectal cancer was 9.5m vs 5.5m for colon cancer. Patients who refused surgery survived longer (16.9m) vs patients who were unfit (7.7m) or had advanced disease (5.2m).

**Discussion:** Advanced disease was the commonest cause for non-operative management, accounting for nearly two-thirds. Patients survived longer if they had rectal rather than colon cancer, were ASA1 and refused surgery rather than those who were unfit or inoperable.

## **Breast One-stop Clinic: Concordance between Primary and Secondary Care**

**Jafferbhoy S, Tandon M, Kirby R, Narayanan S, Soumian S**

**Department of Breast Surgery, Royal Stoke University Hospital, Stoke-On-Trent**

### **Introduction:**

Best practice guidelines recommend that all patients referred to breast clinics should be seen within two weeks. The objective of this study was to assess referral patterns and compare the clinical findings between primary and secondary care.

### **Materials:**

A retrospective study was carried out over a one month period in October 2015. The indications for referral, investigations and outcome data were collected from clinical information system.

### **Results:**

Out of 307 patients with breast symptoms, 36% aged 50 or above. Only 33% were referred as suspected cancer. Breast lump was the most common reason for referral (54%), followed by nodularity (22%), breast pain (15%), nipple discharge (5%), nipple changes (3%) and abnormal imaging (1%).

The clinical findings between primary and secondary care were concordant in 45 percent. In the group referred as suspected cancer (33%), 23% had concordant clinical out of which 14% had malignant disease. Malignancy was found in 0.5% of the non-urgent referrals.

### **Conclusion :**

The study suggests that although concordance between primary and secondary care is low, the cancer pick up rates from suspected cancer referrals from primary care are significant. New guidelines may be necessary as cancer yield from non-urgent cases is small.

## Comparison of outcomes following infra-popliteal endovascular intervention in the BASIL-1 trial (1999-2004) and in a contemporary series (2009-2013)

- 
1. Mr Matthew A Popplewell MB ChB MRCS, Research Fellow, University of Birmingham Department of Vascular Surgery
  2. Mr Huw OB Davies, Research Fellow, University of Birmingham Department of Vascular Surgery
  3. Miss Mary Renton, Academic Foundation Programme Trainee, Heart of England Foundation Trust, Birmingham UK
  4. Mr Gareth Bate, Research Nurse, University of Birmingham Department of Vascular Surgery
  5. Mrs Smitaa Patel, Senior Statistician, Birmingham Clinical Trials Unit.
  6. Professor Andrew W Bradbury, Professor of Vascular and Endovascular Surgery, University of Birmingham Department of Vascular Surgery

### Objectives

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To compare outcomes in 48 patients from the BASIL-1 trial (B1) and 74 patients in a recent contemporary series (CS) from a tertiary vascular unit undergoing primary infra-popliteal (IP) endovascular (EV) intervention for severe limb ischaemia.

### Methods

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Individual patient data were obtained from prospectively gathered, computerised BASIL-1 and contemporary databases. The primary outcome was amputation free survival (AFS); secondary outcomes were overall survival (OS), major (above ankle) limb amputation, re-intervention, immediate technical success and length of hospital stay during index procedure.

### Results

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B1 and CS patients were not significantly different in terms of male sex, age, the presence of diabetes, previous stroke, myocardial infarction, previous revascularisation of the same leg, or tissue loss. Immediate procedural technical success was significantly higher in the CS patients ( $p=0.01$ ). B1 patients were more likely to have concurrent EV treatment of the superficial femoral ( $p=0.01$ ) and/or popliteal artery ( $p=0.006$ ), and more likely to have occlusive disease treated ( $p=0.02$ ). There was no significant difference in AFS, OS, major amputation, re-intervention or length of stay.

### Conclusions

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Despite significant improvements in immediate technical success rates, outcomes following EV treatment of SLI due to IP disease have not improved between 1999-2004 (B1) and 2009-2013 (CS).

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Comparison of Outcomes of Patients With and Without Type 2 Diabetes Before, 2 and 8 Weeks after Sleeve Gastrectomy and its Relation to Weight Loss at 26 Weeks

Jenny Abraham, Neha Shah, Abdul-Rasheed Rabi, Tom Barber, Sudhesh Kumar, Vinod Menon, Milan K Piya

**Aim:** To compare excess weight loss (% EWL) on pre-op very low calorie diet (VLCD) and post- laparoscopic sleeve gastrectomy (LSG) in bariatric patients with and without Type 2 diabetes (T2DM). To also assess glycaemia, and insulin requirements post-LSG.

**Method:** LSG operations performed May 2014-September 2015 in a single surgical centre had HbA1c and DM medications recorded at the start of the 2-wk pre-op VLCD and 8-wks post-LSG with more frequent weight and HbA1c measurements up to 26-wks.

**Results:** Eighty-three LSGs were performed. 48% had T2DM. The %EWL during the 8-week post-op period was greater in patients with T2DM (19.6±7.4% vs 15.9±6.4%, P=0.02). In the T2DM group, weight loss in the 2-week and 8-week post-op period positively correlated with %EWL at 26 weeks (R=0.6, P=0.01 and R=0.7, P=0.002, respectively). Mean HbA1c reduced 8 weeks post-LSG (60.9±22.5 vs 50.9±15.6mmol/mol, P=0.03). Insulin dose reduced by >60% in 91.9% of patients on insulin, but 73% were still on insulin 8 weeks post-LSG.

**Conclusion:** Patients with T2DM had greater %EWL at 8-weeks post-LSG but not at 26-weeks. In T2DM, %EWL at 2 and 8-weeks post-LSG may predict longer-term weight loss. Insulin should be reduced but not stopped before LSG and requirements monitored after.

**High troponin levels in post-operative elective vascular patients correlate with adverse post-operative outcomes**

**Toritseju O Sillo, Mehtab F Ahmad, Richard Pierson, Helga Becker, Andrew W Garnham, Michael L Wall**

**Black Country Vascular Network, Russells Hall Hospital, Pensnett Road, Dudley, West Midlands DY1 2HQ**

**Aims**

We sought to establish a link between raised troponin levels patients in the first 48 hours after major elective vascular surgery, and post-operative complications.

**Methods**

A single-centre, prospective observational study in patients undergoing major elective vascular surgery was performed. Troponin levels (using a highly sensitive TnT assay) were measured at 24 and 48 hours post-operatively.

**Results**

Between July 2015 and January 2016, 158 patients (75.9% male, mean age 73.4 years) were identified who had HsTnT measurements at 24 and 48 hours post elective vascular surgery. The majority procedures were lower limb bypass n=33, carotid endarterectomy n=28, endovascular aneurysm repair n=26, femoral endarterectomy n= 23 and open aortic aneurysm repair n=22. Of these, 55 had raised HsTnT levels (34.8%). 24 developed cardiovascular complications and 26 developed other complications .The relative risk (RR) of cardiovascular complications in patients with raised hsTnT was 4.55 (95% C1 2.01-10.3). The RR of non-cardiovascular complications in patients with raised hsTnT was 1.61 (95% CI 0.80-3.23), but did not reach statistical significance.

## Conclusions

Raised levels of troponin are detected in >30% of patients who have major elective vascular surgery. This is strongly correlated with adverse cardiac events. There was a non-significant trend towards an increase in other morbidity.

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### “Effect of cold ischaemia time on outcome after living donor renal transplantation”

#### Authors

**Sefa W. Canbilen (4), Jay Nath(1), James Hodson (3), Nicholas G. Inston (1), Adnan Sharif (2) Andrew R. Ready (1)**

**Departments of Renal <sup>1</sup>Surgery, <sup>2</sup>Medicine & <sup>3</sup>Biostatistics, University Hospital Birmingham NHS Trust, Birmingham, UK.**

**<sup>4</sup>Third year medical student, School of Medical & Dental Science, University of Birmingham, UK**

#### Background

The aim of this study was to determine whether modest prolongation of Cold ischaemia time CIT (up to 8 hours) impacts negatively on transplant outcome. This is clinically important, owing to the increasing number of cross centre kidney transplants performed.

#### Methods

Retrospective cohort study of 9,156 adult primary kidney transplants (January 2001-December 2014). Data was obtained from national (NHSBT and UK Renal Registry) databases. Patients were divided into 3 groups depending on CIT (0-2 hours, 2-4 hours and 4-8 hours) and outcomes compared.

#### Results

There was a higher rate of delayed graft function in the group with the longest CIT (5.0%, 4.4% and 7.2% p=0.008) However, there was no difference in five year graft survival (death censored) between groups (91.0%, 90.8% and 89.9% p=0.250). There was also no difference in five year patient survival (p=0.263) or 12 months creatinine (0.061) between groups.

#### Conclusion

Patients receiving kidneys transplants with modest prolongation of cold ischaemia time have excellent functional outcomes. The small increase in delayed graft function in this group is unlikely to alter clinical practice such as cross centre living donor kidney transplants.

## **Multidisciplinary Meetings: should all patients be discussed?**

**S Jafferbhoy, RM Kirby , S Narayanan, S Soumian**  
**Department of Breast Surgery, Royal Stoke University Hospital, Stoke-On-Trent**

### Background

Regular multidisciplinary meetings (MDM) are resource intensive activities. NICE recommends all patients with recurrent or metastatic breast cancer should be discussed in MDM. The aim of this study is to assess the role of MDM in patients with known metastatic breast cancer.

### Methods:

Patients with metastatic breast cancer discussed in MDM from January to December 2015 were identified from the Cancer Registry. Demographic details, reason for discussion and involvement of various specialties in MDM outcome was recorded.

### Results:

During this 12 month period, 96 metastatic breast cancer patients were discussed out of which 39 were on palliative treatment following MDM discussion in the past. The reason for MDT discussion was to review imaging (82%), review biopsy (10%), change in treatment plan (5%), palliative mastectomy (2.5%), debulking pelvic surgery (2.5%) and breast reconstruction (2.5%). Radiologists were involved in 82% cases, pathologists in 15% and surgeons were involved in only 5% cases.

### Conclusion:

Majority of patients with known metastatic breast cancer benefit from discussion in radiology meetings only. MDM resources can be effectively utilized by discussing only those patients who need simultaneous input from various specialists.

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## **Modelling a Major Incident in the West Midlands Region**

**Authors:** A Beaven, MJ Midwinter

**Affiliation:** University Hospitals Birmingham NHS Foundation Trust and  
NIHR Surgical Reconstruction and Microbiology Research  
Centre, Queen Elizabeth Hospital Birmingham, Mindelsohn Way,  
Edgbaston, Birmingham, B15 2WB

**Introduction:** Recent terrorist plots and mass casualty incidents have forced European health organisations to consider their major incident plans.

**Objective:** To test the West Midlands major incident plan using data published from the Paris terror attacks of November 2015.

**Methods:** The numbers and severity of injured patients from the mass casualty event in Paris were applied to the West Midlands major incident plan, and a theoretical exercise undertaken to distribute casualties in accordance with the strategy.

**Results:** The West Midlands major incident plan would result in wide dispersal of patients. The Pitié-Salpêtrière hospital in Paris was able to treat 50% more casualties than the largest West Midlands hospital plans to treat. In the West Midlands 76 Priority 1 casualties would be distributed to 4 MTCs, approximately 100 Priority 2 patients to 14 trauma units, and up to 125 Priority 3 casualties to 9 local emergency hospitals.

**Conclusion:** Having analysed the West Midlands major incident plan the authors recommend MTCs anticipate receiving a proportion of less severely injured casualties in addition to the expected cohort of Priority 1 patients. Regional major incident plans should be exercised to reassure the public and government that the NHS is prepared for mass casualty incidents.

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**Authors:** Arthur Barrow <sup>1</sup>, Lloyd Rickard <sup>1</sup>, Chris Thompson<sup>1</sup>, Simon Radley<sup>1</sup>, Robert Walt<sup>2</sup>, Tariq Ismail<sup>1</sup>, Stephen Thomas Ward<sup>1</sup>

**Name of Institution:** 1) Department of Colorectal Surgery, University Hospitals Birmingham NHS Foundation Trust, Birmingham, UK 2) Department of Gastroenterology, University Hospitals Birmingham NHS Foundation Trust, Birmingham, UK

#### **Conversion of Colonoscopy to flexible sigmoidoscopy: an audit and re-audit of practice**

**Introduction:** Caecal intubation rates of 90% are a key quality indicator set by the Joint Advisory Group on gastrointestinal endoscopy. Converting colonoscopy to flexible sigmoidoscopy does occur and has the ability to alter individuals' completion rates. An audit of practice was completed in 2015 which showed that 3% of sigmoidoscopies were conversions of colonoscopy requests. Documented reasons for conversion occurred only in 37% cases. These findings were disseminated locally and individually to endoscopists.

**Objectives:** To re-audit the proportion of sigmoidoscopies requested as colonoscopy and reasons given for conversion after dissemination of the original audit findings.

**Design:** Retrospective study of 3 month's of outpatient flexible sigmoidoscopy practice at a major UK teaching hospital. Sigmoidoscopy reports and request forms were interrogated.

**Results:** 15 of the 495 (3%) flexible sigmoidoscopies performed were requested as colonoscopy and affected individual colonoscopy completion rates. Reasons for conversion were documented in 73% cases.

**Conclusions:** Colonoscopy requests are persistently converted to flexible sigmoidoscopy at a low level of 2-3%. This may reflect inappropriate colonoscopy requests. On re-audit of practice, reasons for conversion were now recorded more frequently. By providing reasons for conversion, the potential accusation of 'gaming' the system to improve completion rates can be countered.

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**Title: Non-reversal of Defunctioning Ileostomy in Low Anterior Resection For Rectal Cancer**

**Authors – T Lees<sup>3</sup>, G Swindall<sup>3</sup>, S Karandikar<sup>2</sup>, S Radley<sup>1</sup>, I Geh<sup>1,2</sup>**

**Institutions –**

- (1) Queen Elizabeth Hospital, Birmingham, UK**
- (2) Birmingham Heartlands Hospital, Birmingham, UK**
- (3) University of Birmingham Medical School, Birmingham, UK**

**Abstract:**

Purpose: Defunctioning ileostomy (DI) is often performed during anterior resection (AR) for rectal cancer. We investigate the factors influencing non-reversal of DI.

Methods: Rectal cancer patients undergoing curative surgery in 2 Trusts from 1.1.04-31.12.14 were identified. Percentage of DI reversed, time to reversal and factors influencing non-reversal were investigated.

Results: Of 749 patients, 205 straight to surgery (STS), 250 short course preoperative radiotherapy + immediate surgery (SCPRT) and 294 long course chemoradiotherapy (LCCRT) + delayed surgery. 84 (51%) of STS patients, 151 (87%) of SCPRT patients & 94 (93%) of LCCRT patients had DI. Reversal rate was 88%, 73% and 76% and non-reversal rate 10%, 25% & 21% for STS, SCPRT and LCCRT respectively. Patients receiving preoperative radiotherapy (SCPRT or CRT) were more likely to have DI than STS (89% vs 51%;  $p < 0.001$ ) and less likely to be reversed (74% vs 88%;  $p = 0.007$ ). Increasing Dukes' stage was associated with lower reversal rates ( $p = 0.003$ ). Reasons for non-reversal included pelvic sepsis, co-morbidity, disease recurrence, patient choice. Median duration from AR to reversal was 7m, which was delayed with adjuvant chemotherapy (10m vs 6m;  $p < 0.05$ )

Conclusions: 20% of all DI are never closed. Factors associated with non-reversal are pre-operative radiotherapy and advanced disease.

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**Post Cholecystectomy Diarrhoea: Current Consenting Practice Needs Real Change**

**Mr Anwar Hussain, SpR Colorectal Surgery, Dr Marite Verzune, FY1 General Surgery,  
Dr Muhammad Saad Azhar, FY1 General Surgery, Mr Muhammad Ayub Khan, Consultant Upper GI  
Surgeon  
Department of Colorectal Surgery, University Hospital of North Midlands, UK**

Aim

New-onset post-operative diarrhoea is a significant problem and is reported in the literature in up to 30% of patients undergoing laparoscopic cholecystectomy. However, the majority of patients are not informed of this complication pre-operatively. We aim to look at current consenting practice for laparoscopic cholecystectomy in our unit.

Method

Retrospective analysis of prospectively maintained consent forms of patients undergoing laparoscopic cholecystectomy in a single unit from February to August 2015. We analysed data on the consenting doctor and whether this complication was mentioned.

## Results

74 patients underwent laparoscopic cholecystectomy under 8 different consultants. 14 patients (18.9%) were consented by non-consultants (registrars and SHO's) and the remaining 58 (81.1%) were consented by consultants. 22 patients (29.7%) were consented for post-operative diarrhoea. Of these, 20 (90.9%) were consented by a single consultant. 52 patients (70.3%) were not consented. 6 of 8 consultants did not consent any of their patients for this complication.

## Conclusion

Our study shows that the majority of patients are not being consented for post-operative diarrhoea which is against good surgical practice and can be a cause of litigation in the future.

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## **Pre- and post-operative hypomagnesaemia is common and associated with adverse outcomes after major elective vascular surgery**

**Toritseju O Sillo, Mehtab F Ahmad, Helga Becker, Andrew W Garnham, Michael L Wall**

**Black Country Vascular Network, Russells Hall Hospital, Pensnett Road, Dudley, West Midlands DY1 2HQ**

### **Aims**

We sought to establish what proportion of patients having elective vascular surgery have pre- and post-operative hypomagnesaemia, and if this correlates with post-operative complications.

### **Methods**

A single-centre, prospective observational study of pre and post-operative hypomagnesaemia in patients undergoing major elective vascular surgery was performed. Hypomagnesaemia was defined as serum magnesium <0.7mmol/L.

### **Results**

Between July 2015 and January 2016, 229 patients (76.9% male, mean age 71.8 years) underwent elective vascular surgery (lower limb bypass n=45, endovascular aneurysm repair n=43, carotid endarterectomy n=42, femoral endarterectomy n= 29 and open aortic aneurysm repair (OAR) (n=27)). Magnesium levels were available in 50.2% (n=115) pre-operatively and in 96.1% (n=220) post-operatively. 13% (n=15) had pre-operative hypomagnesaemia. De-novo post-operative hypomagnesaemia occurred in 26.4% (n=58). This was especially common in the OAR group with 19 patients (70.4%) developing post-operative hypomagnesaemia.

28 patients had cardiovascular complications. 50% were hypomagnesaemic. The relative risk (RR) of cardiovascular complications in hypomagnesaemic patients was 2.33 (95% CI = 1.18-4.62). 38 patients developed other complications. The RR of a non-cardiac complication in hypomagnesaemic patients was 2.33 (95% CI = 1.32-4.11).

### **Conclusions**

Pre- and post-operative hypomagnesaemia are common in patients undergoing major vascular surgery. Post-operative hypomagnesaemia is associated with adverse cardiovascular and other post-operative outcomes.

## **Preoperative treatment and pathological stratification as a determinates of outcome after curative rectal cancer surgery**

**Aneel Bhangu, Simon Radley, Sharad Karandikar, Ian Geh**  
**University Hospital Birmingham and Heartlands Hospital Birmingham**

**Introduction:** Current analyses of disease-free survival (DFS) after resection of rectal cancer assume that patients treated by straight to surgery (STS), short-course radiotherapy and immediate surgery (SCPRT) or long-course chemoradiotherapy (LCCRT) have equivalent stage for stage prognosis. This study aimed to validate or refute this assumption.

**Method:** Patients at two institutions undergoing curative surgery from 01/01/2004 and 01/04/2015 were identified. Those considered resectable had STS or SCPRT and those requiring downstaging had LCCRT. Cox's proportional hazard models were used to adjust 5-year DFS.

**Results:** Of 708 patients, 31% had STS, 34% had SCPRT, 35% had LCCRT. The overall pathological findings were: 6% CRM+, 60% pT3-4, 32% pN+, 28% EMVI+. In pT0-2 patients, STS/SCPRT and LCCRT had similar DFS (adjusted HR 1.51, 95% CI 0.72-3.22) but LCCRT had reduced DFS in pT3-4 patients (HR 1.87, 1.22-2.86). There were borderline associations between LCCRT and reduced DFS in both pN- (HR 1.51, 0.94-2.41) and pN+ (HR 1.80, 1.00-3.32). In pEMVI- patients, LCCRT was associated with reduced DFS (HR 2.00, 1.25-3.21) but in pEMVI+ patients, there was no DFS difference compared to STS/SCPRT (HR 1.53, 0.84-2.77).

**Discussion:** Survival analyses for rectal cancer should be presented by use of preoperative radiotherapy type and specific stage.

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**Title: Surgical review clinic: does the ambulatory model deliver quality care?**

**Authors: Waite K, Ward J, Khaled A, Oluwasomidotun I, Warburton J & Youssef H**

**Centre: Good Hope Hospital, Sutton Coldfield, UK**

**Aim:** Review clinic provides ambulatory care for selected surgical patients. Patients return for repeat assessment with pre-arranged radiological investigation within 48 hours of index presentation. The aim was to assess the quality of the service delivered at a British DGH.

**Methods:** Data was collected prospectively for 4 weeks including demographics, waiting times and outcomes. The RCS/ASGBI's emergency surgery ambulatory care (ESAC) pathway standards were used for comparison. For 2 weeks, patients' opinions were also sought, using a questionnaire.

**Results:** Thirty-five patients attended Review clinic in the study period. Thirty-one were reviewed within 48 hours of index presentation. Delayed reviews were due to patient choice. Thirty-three patients were discharged. Two required admission (5.7%). All patients with complete datasets were reviewed by a Specialist Registrar. There were no admissions between index admission and Review Clinic. Fifteen patients provided feedback. Eleven patients were satisfied with the care received. There were reports of long wait times in free text responses. Five patients reported not receiving sufficient information about the service.

**Conclusions:** Review clinic provides a safe and effective ambulatory pathway for the assessment and management of selected patients. There are opportunities to improve the patient's experience by improving booking systems and patient information.

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**Title: THE IDENTIFICATION AND VALIDATION OF GRIN2D AS A NOVEL ENDOTHELIAL TARGET IN COLORECTAL CANCER, AND THE INVESTIGATION OF ITS EFFECTS AS A THERAPEUTIC TUMOUR VACCINE**

**Authors:** Ferguson HJM<sup>1,2</sup>, Wragg J<sup>1</sup>, Bicknell R<sup>1</sup>, Ismail T<sup>2</sup>.

**Affiliations:** 1) University of Birmingham

2) University Hospitals Birmingham NHS Foundation Trust.

Abstract

A shortlist of candidate tumour endothelial markers was generated by Microarray comparison of differential gene expression between multiple patient-matched colorectal cancer and normal colon samples. This list was narrowed through a process of literature review, real-time quantitative polymerase chain reaction and immunohistochemistry.

GRIN2D, a subunit of a glutamate dependent, ionotropic NMDA receptor, and facilitator of cellular calcium influx, previously found in neuronal tissues, was identified as the most promising target from this shortlist.

Through siRNA knockdown and analysis in in vitro models of angiogenesis, it has been demonstrated that a decrease in GRIN2D expression significantly decreases cellular migration, communication and chemotaxis, without adversely affecting cell viability or proliferation in HUVEC.

Vaccination with a murine GRIN2D-Fc fusion protein in combination with Freund's adjuvant stimulated a specific immune response to this self-antigen, by breaking immune tolerance. The resulting increase in specific IgG1 antibody titers, indicative of Th2 T-cell response, resulted in a significant reduction in physiological angiogenesis in the subcutaneous sponge assay, and a significant decrease in colorectal tumour growth in a murine subcutaneous CT26 tumour model.

GRIN2D represents a novel tumour endothelial marker in colorectal cancer, with significant angiogenic effects.

## **Surgical Management of Angiosarcoma of the Breast at a Tertiary Referral Centre**

**Jagdeep K Singh, Robert Warner, Anant Desai, Samuel Ford, David Gourevitch and Michael Hallissey**

**Aims:** Angiosarcoma of the breast is a well-recognised, but rare complication of radiotherapy following breast conservation. Excision is frequently incomplete and associated with a high local recurrence rate and mortality. We describe our surgical experience in managing this condition from referrals across the West Midlands.

**Methods:** Between May 2014 and January 2016 (20 months), 13 patients were identified with a median age of 68 from a prospective database. Twelve patients were referred from other Trusts; 12 presented with radiation-induced angiosarcoma.

### **Results:**

The median latency from radiotherapy to presentation with angiosarcoma was 6 years. Patients underwent either mastectomy or wide excision of the chest wall radiotherapy field; 12 required reconstruction with latissimus dorsi/abdominal flaps. Resection specimen size ranged between 179x91mm and 650x540mm; median tumour size was 83mm. Complete excision rate (complete histological margin >10mm) was 69% (9/13 patients).

Local recurrence occurred in 3 patients (23%); excision was incomplete in 2 and median time from surgery was 17 months. Two patients underwent salvage excision and reconstruction; one is awaiting further surgery.

### **Conclusions:**

Achieving complete surgical excision of angiosarcomas remains challenging and requires wide excision of the chest wall radiotherapy field. Early referral and management by a dedicated sarcoma-plastic reconstructive team is recommended.

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## **Surgical Site Infection (SSI) rates post major colorectal surgery before and after the introduction of 2% alcoholic chlorhexidine skin preparation**

**Farrar E, Hardern T, Nepogodiev D, Pinkney TD**

**Academic Department of Surgery, University Hospitals Birmingham NHS Foundation Trust**

**Purpose:** Surgical site infection (SSI) is the commonest complication following colorectal surgery and is associated with increased morbidity, mortality and prolonged inpatient stay. The agent used for skin preparation in theatre at our centre was changed in June 2015 from iodine-based or weak aqueous chlorhexidine to 2% alcoholic chlorhexidine. We aimed to assess the impact of change on the SSI rate after major colorectal surgery.

**Method:** Electronic records of all patients undergoing major colonic surgery in 2015 at our centre were reviewed. Only those who had undergone in-person post-operative review with documented wound assessment within 3 months of surgery were included. Patients were divided into group A (old skin preparations) and group B (2% alcoholic chlorhexidine).

**Results:** The SSI rate in group A was **17.0%** (30/176) and **13.5%** (26/193) in group B (p=0.34). The proportion of SSIs presenting after discharge increased from 43.3% (13/30) to 73.1% (19/26) following introduction of the new skin preparation.

**Conclusions:** The introduction of 2% alcoholic chlorhexidine skin preparation was not associated with a statistically significant reduction in overall incidence of SSI, although rates did drop. There was a reduction in early (in-hospital) SSI rates with the new preparation. Further high-quality prospective research is needed.

## POSTER LIST

### **A Retrospective audit of trauma & orthopaedics operation notes and post-operative instructions**

J Matthews, M Clarke, L Rickard, E Farrar, A Sales, K Tadrak, S Evans

Department of Trauma & Orthopaedic Surgery, UHB

### **An unusual presentation of recurrent oesophageal perforation**

S Malik, A Babu, M Dey, N Balaji

University Hospital of North Midlands, Stoke-on-Trent

### **Clinical audit: management of acute malignant large bowel obstruction**

E P Kew, D McArthur

Birmingham Heartlands Hospital

### **Diarrhoea after laparoscopic cholecystectomy: a little known complication**

M S Azhar, A Hussain, M A Khan,

Department of General Surgery, University Hospital of North Midlands

### **Does medial –to-lateral vs lateral-to-medial approach affect short-term outcomes in laparoscopic colorectal surgery?**

A Hussain, A Torrance, M S Azhar, A Tsiamis, R Dawson

Department of Colorectal Surgery, University Hospital of North Midlands

### **Is there any relation between the value of CRP in the first post operative day and the development of sepsis complications in elective colorectal resections?**

Y Rajjoub (1), N Saffaf(2), M Peacock(1)

Gloucestershire Hospitals NHS Foundation Trust(1), Birmingham Heartlands Hospital(2)

### **Laparoscopic vs open inguinal hernia repair: Is laparoscopic actually quicker?**

A Hussain, M S Azhar, A Tsiamis, M A Khan

Department of Colorectal Surgery, University Hospital of North Midlands

### **Referral volume and patterns in general paediatric surgery in a contemporary UK district hospital**

A Gaunt(1), S Patel(2), D Bowley(2), C Hendrickse(2), O Gee(1), S McCabe, A Coulden

Birmingham Children's Hospital(1), Birmingham Heartlands Hospital(2)

### **Tissue injury and haemorrhage from trauma**

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