

Northwest Research Collaborative Annual Report

December 2016





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The NWRC website contains contact details for the committee, latest news and updates along with summaries of all our projects. It is maintained by the NWRC webmaster with domain registration kindly paid for by the North West Surgical Trials Centre.

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Annual Report

Annual report was designed and compiled by Rebecca Fish with contributions from NWRC committee and all project leads

Foreword

Welcome to the NWRC annual report for 2016

Over the past 9 years, collaborative research groups have been developed by surgical trainees across the UK with the support of senior surgeons, surgical associations and the Royal Colleges. The number of collaborative groups have grown rapidly to encompass a wide range of surgical specialties, with 15 new collaboratives forming between 2012 and 2013 alone¹. The UK collaborative model is leading the world in collaborative trainee- led surgical research and the recently developed GlobalSurg includes an international network of over 3000 clinicians in more than 60 countries^{2,3}.

The Northwest Research Collaborative was formed in mid-2012 by a group of Northwest based general surgical trainees, with encouragement from some supportive consultant colleagues. Our aim is produce high quality, high impact, clinically relevant research. Since the commencement of our first project, Packing of Perianal Abscess Cavities (PPAC), we have gone from strength to strength.

Over the last 4 years, our work has been published as 6 peer reviewed journal articles and 8 abstracts, and presented as 10 oral presentations and 15 posters at national and international conferences. We have collaborated on 4 projects with the National Research Collaborative with a further project commencing in 2017. We have forged links with the Northwest Surgical Trials Centre and represent trainees via the executive committee meetings. We are currently developing two randomized controlled trials, one of which brings together two regional collaboratives and two surgical trial centres for the first time.

The committee works to promote awareness and involvement with the NWRC and our projects amongst regional surgical trainees at all level of training. Senior trainees who have acquired research skills and experience through working on our projects are now taking on mentoring roles in projects being led by more junior trainees. Our project development guidance and authorship policies ensure that we have a transparent and fair process for dissemination of our work.

As our first ever annual report, we include a review of all our projects to date. The achievements of the NWRC are testament to the enthusiasm and hard work of all those trainees and consultants who have contributed. We look forward to building on our successes into 2017.

Nick Heywood (chair) and the NWRC committee, December 2016

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1. Multi-centre observational study of outcomes after drainage of acute perianal abscess (PPAC Study)

Contributors and sites

Steering committee: L Pearce, S R Smith, K Newton, J Smith, P Barrow, L Hancock.

National collaborators and principle investigators for the study: S. Duff (University Hospital South Manchester NHS Trust), N. Smart (Royal Devon & Exeter NHS Foundation Trust), A. Jadav (Lancashire Teaching Hospitals NHS Trust), C. Harris (East Lancashire NHS Trust), D. Smith (Bolton NHS Foundation Trust), F. Reid (Stockport NHS Foundation Trust), J. Barker (Blackpool Teaching Hospitals NHS Foundation Trust), M. Paraoan (Wrightington Wigan & Leigh NHS Foundation trust), M. Muhammad (Tameside Hospital), M Williamson (Royal United Hospitals Bath NHS Foundation Trust), D. Vimalachandran (Countess of Chester Hospital).

Roles: The steering committee of this study implemented the design across regional and national centres, coordinated data collection and conduct at local centres, contributed to data interpretation, edited the manuscript and approved the final version for submission. The local investigators identified patients and collected data at local sites.

Acknowledgements: C. Kirwan, N. Krishnamohan, R. Teasdale, N. Heywood, J. Hughes, A. Haque, C. Lowe, J. Martin, A. Mohamed, A. Jawaid, A. Chan, R. Arsalani, J. Pollard, C. Hall, R. Brindle, P. Capozzi, J. Law, I. Peristerakis, E. Blower.

Introduction

Management of perianal abscesses has remained largely unchanged for over 50 years. The evidence for postoperative wound packing is limited and may expose patients to painful procedure with no clinical benefit and at considerable increased cost.

Methods

Patients were recruited in 15 UK centres between December 2013 and October 2014. Outcome measures included number of dressing (pack) changes, healing, recurrence, return to work/normal function, postoperative fistula in ano and health utility scores (EQ 5D). Pain was measured before during and after dressing change on a visual analogue scale.

Results

Some 141 patients were recruited (median age 39 (range 18-86 years)). The mean number of dressing changes in the first 3 weeks was 13 (range 0-21) equating to an annual cost to the National Health Service of €6 453 360 in England alone per annum. Some 43.8 per cent of wounds were healed by 8 weeks after surgery and 86 per cent of patients had returned to normal function. Some 7.6 per cent of abscess had recurred and 26.7 per cent of patients developed a fistula in ano by 6 months following surgery. Patients reported a twofold increase in pain scores during and after dressing changes.

Conclusion

Recurrent abscess is rare and fistula occurs in one quarter of the patients. Packing is painful and costly.

Output

Prizes

BJS Prize.

Association of Coloproctology of Great Britain and Ireland. Edinburgh, July 2016

Multicentre observational study of outcomes after drainage of acute perianal abscess. L Pearce, K Newton, SR Smith, P Barrow, J Smith, L Hancock, CC Kirwan, J Hill, North West Research Collaborative.

ASiT Short Paper Prize.

February 2015

Packing of Perianal Abscess Cavities (PPAC) Study, A Multicentre observational feasibility study. Interim Analysis. North West Research Collaborative.

Papers

Multicentre observational study reporting the outcomes of acute perianal abscess (Packing of Perianal Abscess Cavity (PPAC) Study) L Pearce, K Newton, S Smith, P Barrow, J Smith, L Hancock, C Kirwan, J Hill on behalf of North West Research Collaborative (NWRC). *Br J Surg.* 2016 Jul; 103(8):1063-8. PMID 27061287

2. Single Use Negative pressure dressing for Reduction In Surgical site infection following Emergency laparotomy (The SUNRRISE Trial)

Contributors and sites

Steering committee: Hamish Clouston; Rebecca Fish, Hema Sekar, Peter Coe, Martyn Stott, Sarah Duff

Aim

In a randomised controlled study determine if the use of Single Use Negative Pressure Dressings (SUNPDs) reduces the development of wound infections following emergency laparotomy. A collaborative trial with the West Midlands Research Collaborative

Background

The proposed randomised control trial aims to explore whether the use of a single use negative pressure dressing post-operatively can reduce surgical site infection (SSI) rates after emergency abdominal surgery. Currently, SSI rates after abdominal surgery remain high and emergency abdominal operations carry one of the highest rates of SSI of all operation types, with a resultant significant detrimental effect for both patients and the health service. High numbers of emergency abdominal surgeries are performed annually and upon patients that are already considerably unwell. As such, they represent a cohort of patients that could stand to gain significant benefit from attempts to reduce SSIs. Some evidence exists that using a single-use negative pressure dressing (SUNPD) system can reduce SSI rates in other types of closed wounds but there exists a paucity of evidence for its efficacy in abdominal wounds. There is a clear clinical need for a definitive, appropriately powered multicentre randomised control trial in this setting.

Methods

The proposed SUNRRISE trial is a pragmatic, multicentre, phase III randomised controlled trial comparing the use of single-use negative pressure dressings (SUNPD) against the current standard practice (simple passive self-adhesive wound dressings) to reduce the risk surgical site infection (SSI) after emergency laparotomy surgery at multiple UK sites. The project will be undertaken over a 30-month period with an internal feasibility phase.

The trial is a collaboration with the West Midlands research collaborative.

Progress to date

We have been successful in the first round of an NIHR Research For Patient Benefit (RFPB) grant. The second stage application will be submitted by 30th of November.

Output

Methodology has been accepted for oral presentation at the NRCM 2016.

3. Emergency Laparotomy and Frailty; a national multi-centre prospective cohort study of older surgical patients (ELF study)

Contributors

Steering Committee: K Parmar (Chair), J Law, J Boyle, P Casey, I Farrell, I Maitra

Chief Investigator: S Moug

Other contributors: L Pearce, J Hewitt, OPSOC (Older Persons Surgical Outcomes Collaborative)

Sites (UK site recruitment ongoing)

North West England: Blackburn, Blackpool, Bolton, Lancaster, MRI, Preston, Salford, Wythenshawe, Wigan; **Scotland:** Greater Glasgow & Clyde; **Wales:** Cardiff

Aim

To evaluate the use of a recognized frailty score (Rock Wood 7 point scale) in predicting outcomes following emergency laparotomy in patients aged 65 and over.

Background

The most recent NELA report highlighted the need to improve outcomes in patients aged over 65. Most current risk prediction tools are extrapolated from much younger patients. Frailty scores are a relatively new concept; high pre-operative frailty scores have been shown to be associated with increased post-operative mortality and morbidity. The use of a validated and easy to use frailty score may therefore aid doctors and patients in making more informed decisions when considering treatment options.

Methods

All patients aged over 65 undergoing emergency laparotomy will be identified prospectively for a 3 month period commencing 1st December 2016. Data will be collected for patient demographics, frailty on admission (using Rockwood scale), time to surgical intervention, LOS, complications, 30 day mortality, independence status pre and post admission and time spent in intermediary care. The primary outcome measure is 30 day mortality; Secondary outcome measures include Clavien Dindo post-operative complications and lowering of independence status. Statistical support for data analysis is being provided by OPSOC (Older Persons Surgical Collaboration).

Progress to Date

The ELF steering committee have written the study protocol, ethical review application, funding applications and trial registration documents. A date has been arranged to present the study to the North West Trials Centre Trial Adoption Committee for additional support.

Output

An abstract has been accepted for oral presentation at the National Research Collaborative Meeting in November 2016. This is aimed at increasing awareness and UK-wide site recruitment

4. Extended Venous Thromboprophylaxis Post Colorectal Cancer Surgery; A Survey of Current Practice.

Contributors

Steering Committee: A Rees, N Heywood, H Clouston, J Nicholson, C Kirwan

Other contributors: L Pearce, M Stott, L Jieqi, L Derbyshire, D Palihawadana, J Hughes, A Dosis, R Cooke, V Richards, C Harris, T Lee

Aim

In a pan-UK survey, to determine current practice in every acute NHS hospital undertaking elective colorectal cancer surgery with regards extended VTE prophylaxis.

Background

Colorectal cancer (CRC) is a risk factor for venous thromboembolism (VTE). The development of VTE in the context of CRC is associated with poorer outcomes. Over a third of patients developing VTE after CRC surgery do so following discharge from hospital. This finding has led to international guidance that patients undergoing surgery for CRC receive extended (28 days) pharmacological VTE prophylaxis with low molecular weight heparin. In the UK this guidance has been incorporated in the most recent NICE guidance regarding venous thromboprophylaxis. However, the national picture regarding the use of extended course venous thromboprophylaxis is not known.

Methods

A Freedom of Information (FOI) request will be submitted to every acute UK NHS hospital via the corresponding FOI officer (See appendix A). Each contributor will be allocated approximately ten acute trusts for submitting FOI requests. Each contributor will be responsible for undertaking data collection each hospital and completing the corresponding case report form (CRF). The data will then be collated centrally and data analysed.

Progress to Date

Pilot FOI requests have been submitted and a response received from seven trusts in the Northwest region. The CRF has been trialed on these responses to ensure its validity.

Output

An abstract for the methodology has been accepted for oral presentation at the National Research Collaborative Meeting in November 2016.

Future Plans

FOI requests are due to be distributed nationwide through additional collaborators at the end of November.

5. Audit of Clinical Coding of General Surgical Admissions in the Northwest of England

Contributors

Steering committee: Heywood NA, Gill MD, Charlwood N, Brindle R, Kirwan CC

Contributors & Sites: Allen N, Charleston P, Coe P, Cunningham J, Duff S, Forrest L, Hall C, Hassan S, Hornung B, Al Jarabah M, Jones A, Mbuvi J, Mclaughlin T, Nicholson J, Overton J, Rees A, Sekhar H, Smith J, Smith S, Sung N, Tarr N, Teasdale R, Wilkinson J.

Background

Clinical coding data from hospital admissions provide the basis for Hospital Episode Statistics and Healthcare Resource Group codes, which in turn are required to record data and generate payments for clinical episodes. Inaccuracies in this information may affect payment by results, allocation of health and research resources, and public health data and planning.

Aims

We produced a multicenter study looking into the accuracy of accuracy of clinical coding in general surgical admissions across trusts in the Northwest of England.

Methods

Retrospective data collection took place across seven hospitals in the region using a standardized protocol. In total 28 collaborators were involved which included review of clinical notes relating to the index admission. Audit of these notes was performed by both a clinician and senior clinical coder, blinded to the original codes.

Results

208 cases from seven hospital trusts were reviewed and found “errors” in 93.3% of cases with 4.3% having an error in both primary diagnosis and primary procedure codes. Almost a third of primary diagnoses included some form of error, whether it was due to coder errors, the need for clinical interpretation of notes, insufficient clinical information, or poor documentation. Median tariff was compared pre-audit and post audit (£1,411.50 vs £1387.50, $p=0.997$) and although not significantly different, differences of up to £6000 were found in some cases.

Conclusion

Errors in clinical coding are multifactorial, and although no significant impact was found on tariffs, the accuracy of HES data and therefore the allocation of health care resources and public health planning may be affected. Clinician and coder collaboration is key to ensure accuracy of information.

Output

Abstracts

Improving accuracy of clinical coding in surgery: collaboration is key. Heywood NA, Gill MD, Charlwood N, Brindle R, Kirwan C, Northwest Research Collaborative. Journal of Surgical Research J Surg Res. 2016 Aug;204(2):490-5.

Clinical Coding: Is It Addressed By The Undergraduate Medical Curriculum? N. A. Heywood, M. Gill Northwest Research Collaborative. BJS 2015; 102 (S7): 9–87 (Short Papers 0855)

Accuracy of Clinical Coding in Acute General Surgical Admissions is Improved by Collaboration between Clinicians and Clinical Coders. N.A Heywood, M.Gill., N Charlwood, R Brindle, BJS 2015; 102(s1): p. 9-118 (Short papers 0932).

6. Open and Laparoscopic Inguinal Hernia repair: Northwest Consenting practices

Contributors

Steering committee: C Slawinski, P Coe, N Heywood, R Fish, R Basson, J Barker

Contributors & Sites: S Jabbar, H Satherley, (Royal Blackburn Hospital); S Albert, A Shaw (Blackpool Victoria Hospital); D Smith (Royal Bolton Hospital); T Grundy, J Evans, I Blake, R Kalenderov, A Goscinski (Salford Royal Hospital); H Packer, K Koo, K Baillie (Stepping Hill Hospital); I Samra (North Manchester General Hospital); A Seager (Lancashire Teaching Hospitals NHS Foundation Trust); M Stott (University Hospital of South Manchester); M Hossack, K Waite, N Patel, P Khincha (Royal Albert Edward Hospital).

Acknowledgements: A Kausar (Royal Blackburn Hospital); R Dave, S Rai (Stepping Hill Hospital); S Malik (North Manchester General Hospital) R Date (Lancashire Teaching Hospitals NHS Trust) A Sharma (University Hospital South Manchester) M Haque (Royal Albert Edward Hospital).

Background

Inguinal hernia repair is one of the mostly frequently performed general surgical operations; 65,000 procedures were performed in 2012/2013. Although serious complications are rare, litigation arising from this procedure has cost the NHS in excess of 7 million pounds sterling between 1995 and 2009, of which 10 per cent of claims were due to an issue with consent. Testicular/cord injury, chronic pain and visceral injury are the most commonly litigated complications. Adequacy of consent for these procedures across Health Education North West (HENW) is unknown.

Aims

To audit the adequacy of written consent for open (OIHR) and laparoscopic (LIHR) inguinal hernia repair across HENW against the complications discussed in the European Hernia Society Guidelines.

Methods

A multicentre retrospective audit of patients undergoing primary OIHR or LIHR between 1st August 2013 and 31st July 2014 was conducted involving nine sites across HENW. Consent forms were reviewed against the complications stated in the European Hernia Society guidelines used as audit standards. Adequacy of consent was calculated as the proportion of complications consented for, from a total of 15 (13 in females) for OIHR and 19 (17 in females) for LIHR.

Results

Open inguinal hernia repair:

673 patients included. Median age was 65 years (range 17-96) and 92% were male. The grade of the consenting clinician was: consultant 46%, ST3 and above 14%, associate specialist 13%,

trust SpR 13%, CT1/2 7%, nurse practitioner 4% and FY1/2 1%. Explanation of procedure benefits was documented in 94%. Median adequacy of consent was 40% (0 – 87%). Less commonly consented complications included: chronic pain (63%), testicular complications (38%), cord injury (24%), bowel (12%) and bladder injury (6%). The primary operating surgeon for each procedure was; consultant 54.2%, associate specialist 12.2%, ST3 trainee or above 15.3%, Trust Registrar 11.1%, core trainee 4.3%, foundation year 2 0.2% and unknown 1%.

Laparoscopic inguinal hernia repair:

347 patients were included. The median age was 57 years (range 18 - 85) and 95% were male. The grade of the consenting clinician was: consultant 44%, ST3 and above 20%, trust SpR 19%, nurse practitioner 8%, CT1/2 4%, associate specialist 2% and FY2 2%. Explanation of procedure benefits was documented in 94%. Median adequacy of consent was 37% (0 - 74%). Less commonly consented complications included: chronic pain (58%), cord injury (54%), testicular complications (28%), bowel (43%) and bladder (28%) injury.

The primary operating surgeon for each procedure was; consultant 88.8%, associate specialist 0.6%, ST3 trainee or above 4.9%, Trust Registrar 4.9%, core trainee vs 0.6, foundation year 2 0% and unknown 0.3%.

Conclusion

Written consent for OIHR and LIHR was inadequate across HENW, including the complications most frequently associated with litigation. Standardised consent form may improve adequacy of consent. Further study will be required to identify if this will reduce litigation.

Our results also demonstrate that case availability does not limit training opportunities in HENW. However, questions are raised regarding case utilisation for training, the reasons for the observed operator mix and potential strategies to maximise training.

Output

Poster presentations

Missed training opportunities in open and laparoscopic inguinal hernia repair. C Slawinski, N Heywood, P Coe, R Basson, R Fish, J Barker and collaborators of the NWRC Consent Audit.

ASIT 40th International Surgical Conference. 18 – 20th March 2016, Liverpool, UK.

Adequacy of written consent in open inguinal hernia repair: A North West Research Collaborative (NWRC) audit. C Slawinski, N Heywood, P Coe, R Basson, R Fish, J Barker and collaborators of the NWRC Consent Audit.

Adequacy of written consent in laparoscopic inguinal hernia repair: A North West Research Collaborative (NWRC) audit. C Slawinski, P Coe, N Heywood, R Basson, R Fish, J Barker and collaborators of the NWRC Consent Audit.

38th International Congress of the European Hernia Society (EHS). 5-8th June 2016, Rotterdam, Netherlands.

Future: Submission of completed analysis to peer reviewed journal.

7. Surgical Management of Fistulating Perianal Crohn's Disease

Contributors

Steering committee: South Yorkshire Surgical Research Group, Northwest Research Collaborative, Lee, MJ, Heywood NA, Sagar PM, Brown SR, Fearnhead NS,

Contributors: Abbas A, Adegbola S, Alfa-Wali M, Ashken L, Barrow P, Brady RR, Couch D, Engledow A, Gammeri E, Gill M, Kadhum M, Kankam H, Kaptanis S, Labib P, Luck J, Majid K, Martin J, Moss A, Nicholson J, Iqbal MR, Singh B, Sengupta N, Sproson C, Stubbs B, Suker F, Tozer P, van Boxel G, Ventham N.

Background

Around one-third of patients with Crohn's disease are affected by Crohn's fistula-in-ano (pCD). It typically follows a chronic course and patients often undergo both long-term medical and surgical therapy. This treatment is not always universally consistent across the country.

Aims

This was a collaborative project run by both the South Yorkshire Surgical Research Group (SySURG) and the Northwest Research Collaborative (NWRC) which set out to describe the current surgical practice in the management of pCD in the UK.

Methods

A survey of surgical management of pCD was designed by an expert group of colorectal surgeons and gastroenterologists to assess acute, elective, multidisciplinary and definitive surgical management. After an initial pilot of the questionnaire at the Digestive Disease Federation 2015 meeting, the survey was refined and distributed nationally through the trainee collaborative networks.

Results

National rollout obtained responses from 133 surgeons of 179 approached (response rate 74.3%). At first operation, 32% surgeons would always consider drainage of sepsis and 31.1% would place a draining seton. At first elective operation, 66.6% would routinely insert of draining seton, and 84.4% would avoid cutting seton. The IBD multidisciplinary team was available to 87.6% respondents, although only 25.1% routinely discussed pCD patients. Anti-TNF- α therapy was routinely considered by 64.2%, although 44.2% left medical management to gastroenterology. Common definitive procedures were removal of seton only (70.7%), fistulotomy (57.1%), advancement flap (38.9%), fistula plug (36.4%) and ligation of intersphincteric track (LIFT) procedure (31.8%). Indications for diverting stoma or proctectomy were intractable sepsis, incontinence, and poor quality of life.

Conclusion

The survey highlighted the variation in practice including the differences in choices of definitive surgery and multimodal management. There is a need to develop practical guidelines to support clinicians in the UK.

Output

Posters

Surgical Management of Fistulating Perianal Crohn's Disease – Results of a UK Survey MJ Lee, N Heywood, P Sagar, SR Brown, N Fearnhead and the FPCD collaborators.

ACPGBI July 2016

Papers

Surgical Management of Fistulating Perianal Crohn's Disease - A UK Survey. Lee MJ, Heywood N, Sagar PM, Brown SR, Fearnhead NS, p CDC. *Colorectal disease : the official journal of the Association of Coloproctology of Great Britain and Ireland*. Jul 16 2016

8. SPLEnic Artery embolization in Trauma (SPLAT) study

NWRC Contributors: Petros Yiannoullou, Katy Newton, Claire Hall, Lyndsay Pearce, Jane Hughes, Ashley Scrimshire, Andrew Macdonald

Trauma Audit Research Network Contributors: Tom Jenks, Omar Boumra, Fiona Lecky

Background

Non-operative management (NOM) of blunt splenic injuries in adult trauma patients is an accepted treatment protocol having evolved from its successful use in children⁴. The goal of NOM is to minimize the need for laparotomy and maximise the rate of splenic preservation⁵. NOM may comprise of observation alone or splenic artery embolization (SAE).

SAE is a catheter angiography based technique that utilizes embolic agents to reduce or arrest bleeding. It can improve the success of NOM regardless of grade of injury and volume of haemoperitoneum^{6,7}. However, studies from the United States have highlighted practice variance between trauma centres, which is associated with a difference in patient outcomes⁸. To date, there is no data on the utilization or efficacy of SAE in England.

Aims

1. To assess outcomes of SAE since the Major Trauma Networks were established in 2012
2. To establish the utilization of and clinician attitudes towards SAE in the management of patients with blunt splenic injuries.

Methods

1. A dataset was drawn from the Trauma Audit Research Network database of all splenic injuries admitted to English and Welsh hospitals from 1st April 2010 to 31st March 2014. Demographic data, injury severity, treatment modalities and outcomes were collected. Management and outcomes were compared before and after RTNs were launched.
2. A survey was distributed through the British Society of Interventional Radiologists to all UK members aiming to identify availability of IR services in England, radiologists' practice, and attitudes toward management of blunt splenic injury.

Results

1. Following introduction of regional trauma networks, the use of splenic artery embolization for management of blunt splenic injury increased from 3.5% to 7.6% ($p=0.001$). A significant reduction in splenectomy rate was also observed (20% to 14.85%, $p=0.012$). Significantly more patients with polytrauma and blunt splenic injury were treated with splenic embolotherapy following 2012 (61.2% vs. 30%, $p<0.0001$). Increasing age, injury severity score, polytrauma, and a Charlson Comorbidity Index above 10 were predictors of increased mortality ($p < 0.001$).

2. 116 responses from respondents affiliated with 23 of the 26 Major Trauma Centres in England were received. 79% of respondents reported availability of a single dedicated interventional radiology service. 50% provide interventional radiology cover to more than one hospital within the network. All offer arterial embolisation for BSI. Only 25% follow guidelines. In haemodynamically stable patients, respondents indicated an increased appetite for angioembolisation as the grade of splenic injury increased from 1–4 (12.5%–82.14%, $p<0.01$). In unstable patients or those with radiological evidence of bleeding, significantly more respondents would offer embolisation for grade 1–3 injuries ($p<0.01$), compared to similar injuries in stable patients. Significantly fewer respondents would offer embolisation for grade 5 compared to grade 4 injuries in unstable patients or those with evidence of bleeding.

Output

Papers

A review of the management of blunt splenic trauma in England and Wales: have regional trauma networks influenced management strategies and outcomes? P Yiannoullou, C Hall, K Newton, L Pearce, O Bouamra, T Jenks, AB Scrimshire, J Hughes, F Lecky, ADH Macdonald. *Ann R Coll Surg Engl* 2016; Oct:1–7 (epub ahead of print) PMID – 27791418

Posters

Attitudes Towards Splenic Artery Embolisation in Trauma Following Introduction of the English Regional Trauma Networks Yiannoullou P, Scrimshire A B, Steinberg L J, Hall C, Newton K, Pearce L, Hughes J, Khan N, Ashleigh R, Macdonald ADH on behalf of the North-West Research Collaborative

British Interventional Radiology Meeting 12th–13th November 2015, London UK

Submission

Interventional Radiology service provision and practice for the management of traumatic splenic injury across the regional trauma networks of England J Hughes, AB Scrimshire, L Steinberg, P Yiannoullou, K Newton, L Pearce, C Hall, ADH Macdonald

Submitted to Injury

9. Catheter Delivered Treatment (CDT) for Deep Vein Thrombosis. A Multi-Centre Study of Current Practice

Contributors

Steering Committee: N. Charlwood, C. Lowe, C. Goatman, J. Buxton, J. Packer, J. Ghosh

Aim

This study aimed to review practice in Catheter Delivered Treatment (CDT) for Deep Vein Thrombosis (DVT) across the North West of England.

Background

Post-thrombotic syndrome is the development of chronic venous insufficiency after DVT and occurs in more than 40% of proximal DVTs. It can have significant impact on Quality of Life with 6% developing severe symptoms and represents 75% of the cost of treating the DVT. NICE guidance recommends consideration of CDT for proximal DVT, with the aim of preventing post-thrombotic syndrome.

Methods

A retrospective review of case notes in four vascular units between March-April 2014 was performed looking at referral pathways, variation in practice & outcomes after CDT for DVT.

Results

Of 2560 cases of DVT identified, only 15 cases underwent CDT (0.58%). Patients were mostly females (11F:4M) with median age 43 years (16-64). Twelve patients underwent catheter thrombolysis and 3 mechanical thrombectomy. Median treatment duration was 36 hours (range 1-96). IVC filter was deployed in 6 patients and venoplasty/stenting performed in six. Complete lysis was achieved in 13 patients. There were two bleeding complications; one minor, one major (managed conservatively). No patients had PE. Median inpatient stay was 7 days (range 5-23) and follow up range was 6-24 months. CDT was safe and effective though the number treated was lower than would be expected and significant variation in practice was noted between units. Vigilance should be heightening amongst admitting physicians to ensure that patients who would benefit from CDT are referred acutely to their regional vascular unit.

Output

An abstract was published in the European Journal of Vascular and Endovascular Surgery and presented or orally at the British Society of Endovascular Therapy Annual meeting 2015.

Catheter Delivered Treatment (CDT) for Deep Vein Thrombosis. A Multi-centre Study of Current Practice, Charlwood, N, Lowe, C. Goatman, J. Buxton, J. Packer, J. Ghosh. European Journal of Vascular and Endovascular Surgery , Volume 50 , Issue 3 , e16

Future Plans

A Manuscript is currently being written and there are plans to set up a multiregional project in the future.

10. National Collaborative projects

Projects initiated by other regional trainee collaboratives in which Northwest centres have collaborated. Participation in these projects has been facilitated by NWRC members and National Research Collaborative.

Clinical Variation in Practice of Laparoscopic Cholecystectomy and Surgical Outcomes: a multi-centre, prospective, population-based cohort study (CholeS Study: A West Midlands Research Collaborative Study)

The aim of this study was to investigate surgical outcomes following acute, 'delayed' and elective cholecystectomies in a population-based cohort using audit standards. All-cause 30-day readmission rate should be less than 10% following cholecystectomy (primary outcome measure). Secondary outcome measures of pre-operative (demographics, admission type, diagnostic tests) peri-operative (difficulty of the operation bile duct injury) and post-operative (length of stay, in-hospital morbidity) factors?

In total, 8,909 patients undergoing cholecystectomy were recruited from 167 hospitals in the UK and Ireland and saw collaboration from 641 individuals. The outcomes have been published in the BJS and presented at a range of national and international meetings?

Publications:

Population-based cohort study of outcomes following cholecystectomy for benign gallbladder diseases. CholeS Study Group, West Midlands Research Collaborative. [Br J Surg.](#) 2016 Nov;103(12):1704-1715. doi: 10.1002/bjs.10287. Epub 2016 Aug 26.

Population-based cohort study of variation in the use of emergency cholecystectomy for benign gallbladder diseases CholeS Study Group, West Midlands Research Collaborative.. [Br J Surg.](#) 2016 Nov;103(12):1716-1726. doi: 10.1002/bjs.10288. Epub 2016 Oct 17

Cost-effectiveness of emergency versus delayed laparoscopic cholecystectomy for acute gallbladder pathology. Sutton AJ, Vohra RS, Hollyman M, Marriott PJ, Buja A, Alderson D, Pasquali S, Griffiths EA; CholeS Study Group and the West Midlands Research Collaborative. *Br J Surg.* 2016 Oct 20. doi: 10.1002/bjs.10317. [Epub ahead of print]

More information: http://wmresearch.org.uk/?page_id=122.

The National Complicated Acute Diverticulitis Audit (CADS: a Yorkshire Surgical Collaborative study)

The CADS audit aims to obtain real life data from patients suffering from acute diverticulitis within the UK to will provide a pragmatic insight into the issues surrounding management and related outcomes. NICE guidance stops short at when to refer to hospital and the study hopes to be a relevant source of data to inform future trial designs and subsequently clinical guidelines.

Data collection is in 3 phases; initial recruitment, after 3 months and at 2 year follow up. It is now entering the third and final phase of the study and the data will hope to inform the development of future trials. We have principal investigators and collaborators from 7 trusts in the Northwest Deanery.

The interim results were presented by the CADS audit team in an invited oral presentation at the Digestive Diseases Federation Meeting in London in June 2015¹⁰.

More information: <http://www.cadsaudit.org.uk/>

Sepsis in emergency general surgery admissions: protocol for a multicentre audit (a Severn and Peninsula Audit and Research Collaborative for Surgeons Project)

The aim of this study is the audit the adherence to international sepsis guidelines amongst acute general surgical admissions and to determine the impact of non-compliance with components of the sepsis-six and surviving sepsis resuscitation bundles. Data is currently being collated to be published in the near future¹¹.

More information: http://www.sparcs.org.uk/?page_id=59.

National Audit of Small Bowel Obstruction (NASBO: a South Yorkshire Surgical Research Group and West Midlands Research Collaborative Study)

Emergency surgery and nutrition are two areas often neglected in the surgical literature. Laparotomy for small bowel obstruction accounted for 49% of all surgical interventions in the first NELA report. There is also heterogeneity in these patients, as some have clear indications for early intervention, others may be managed successfully with a conservative approach, and some may pass from the conservative to operative group.

There is a clear relationship between malnutrition and poor surgical outcomes, particularly infection. There is little in the literature around nutritional assessment and management in the acute general surgical setting. There are guidelines published by NICE (CG 32) which describe indications for nutritional intervention. In our experience, we do not think they are widely practiced.

To address this question, trainees from the South Yorkshire Surgical Research Group and the West Midlands Research Collaborative are working with ACPGBI and other specialist partners. We plan to undertake an audit/service evaluation to understand how we manage nutrition around treatment for acute small bowel obstruction¹²

More information: <http://nasbo.org.uk/study-background/>.

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<https://nwresearch.org/>

