

### 3B MISCELLANEOUS 1

#### **075 EFFECTIVENESS OF TREATMENTS OF VARICOSE VEINS: SYSTEMATIC REVIEW AND EVIDENCE SYNTHESIS**

R Bootun (1), D Epstein (2), S Onida (1), M Ortega-Ortega (2), AH Davies (1)

(1) Section of Vascular Surgery, Imperial College London, London, UK (2) Department of Applied Economics, Faculty of Economics and Business Studies, University of Granada, Spain

**Introduction:** Novel methods of varicose vein treatment have been introduced in the past few years with the expectation that they might be more advantageous than conventional procedures. A systematic review and network meta-analysis was conducted comparing the effectiveness of current treatment (conservative care, surgery, ultrasound guided foam sclerotherapy (UGFS), endovenous laser ablation (EVLA), and radiofrequency ablation (RFA)) to emerging technologies (mechanochemical ablation (MOCA) and cyanoacrylate glue occlusion (CAE)).

**Method:** A systematic review of the literature was undertaken with evidence from randomised controlled trials (RCTs) collected for current technologies. However, because of a paucity of randomised studies, evidence for the newer endovenous ablation procedures was obtained from non-randomised studies in a secondary analysis. Outcomes measured were re-intervention on the truncal vein and re-treatment for residual varicosities.

**Result:** Thirty-three RCTs and a further ten non-randomised studies evaluating MOCA or CAE were analysed. Thirteen RCTs and three non-randomised studies reported on re-interventions and re-treatments. The rate of re-interventions was found to be similar between EVLA, RFA and surgery. The rate of re-intervention after MOCA appears lower than UGFS (incidence rate ratio MOCA v UGFS 0.395) and greater than surgery (incidence rate ratio MOCA v surgery 1.378).

**Conclusion:** This is the first systematic review that has conducted a meta-analysis of re-intervention and retreatment. The high attrition rate is the main risk of bias identified in the RCTs. Further, high quality studies comparing MOCA and CAE to other modalities are needed to establish truncal re-intervention rates and rate of re-treatment of residual varicosities.

**Take-home message:**

The rate of re-intervention following endovenous laser ablation, radiofrequency ablation and surgery are similar. There is insufficient data regarding re-intervention following the non-thermal methods.

#### **076 EVALUATION OF THE QUALITY OF ONLINE INFORMATION TO ASSIST DECISION MAKING FOR PATIENTS WITH COLON CANCER USING THE DISCERN TOOL**

E O'Connell, E Andrews

Cork University Hospital

**Introduction:** The internet is a common source of information for patients with bowel cancer. The quality of online articles related to treatment options for colon cancer is unclear. The DISCERN tool was designed to determine the quality of information on treatment choices provided by health organisations, charities and self-help groups. The aim of this study was to apply the DISCERN criteria to measure the quality of online articles related to treatment decision in colon cancer.

**Method:** An internet search was conducted using a combination of the terms "treatment of/for bowel cancer, treatment of/for colon cancer, treatment of/for colorectal cancer". The first 20 results returned for each search were selected. With duplications excluded 40 results were returned. Each article was rated using the DISCERN criteria with a score of 1 indicating a low quality article and a score of 5 indicating a high quality article.

**Result:** Online articles scored an overall mean DISCERN score of 2.37 indicating low to medium quality. Articles sourced from government programmes and well recognised cancer charities were associated with the highest rating. An important deficit identified was the lack of information related to treatment side effects and the potential impact of treatments on quality of life.

**Conclusion:** Widely searched articles related to colon cancer treatment are associated with low to medium quality DISCERN scores. Objective evaluation of the quality of online information allows identification of higher quality sources which may be recommended to patients to assist understanding of treatment options.

**Take-home message:**

Information available to patients online is variable in quality. Objective evaluation of information allows identification of high quality information sources for patients

#### **077 YOUTUBE™ AS A PATIENT INFORMATION SOURCE ON SURGERY IN CROHNS DISEASE**

J Marshall (1), D Baker (1), MJ Lee (2), GL Jones (3), AJ Lobo (4), SR Brown (2)

University of Sheffield (1), Department of General Surgery, Sheffield Teaching Hospitals (2), Department of Psychology, Leeds Beckett University (3), Department of Gastroenterology, Sheffield Teaching Hospitals (4)

**Introduction:** Youtube™ is an open-access video-hosting site and has increasingly become a source of publicly available healthcare information. This study aimed to describe patient relevant content of Youtube videos for patients with CD considering surgery.

**Method:** YouTube™ was searched for videos about surgery for CD. The 50 most viewed videos were identified and categorised by source, content themes and assessed for viewer interactions. Video

comments were used to describe the usefulness of the video content to viewers.

**Result:** Twenty-two videos were patient sourced, 26 from professionals and 2 educational. The median number of likes for patient videos was significantly higher than professionally developed videos (59 vs 6.5,  $p=0.0006$ ). Patient developed videos received more positive comments on video information than those from professionals (9 comments vs 3), but more comments asking for further information (12 vs 5). The median number of likes for experience of surgery ( $p=0.0366$ ) and patient experience of living with Crohn's ( $p=0.0017$ ) themed videos, were significantly higher than management of Crohn's themed videos (35 and 55 vs 6 respectively).

**Conclusion:** CD patients use YouTube™ as an information source about surgery. They may prefer storytelling patient videos to the lecture-style of professional videos. Current patient developed videos provide limited information, as reflected by information requests in viewer comments. This suggests a need for professional videos to be presented in a patient friendly manner. Storytelling patient-centred videos combined with clinical evidence may be a good model for future videos. Crohn's Disease = CD

**Take-home message:**

Patients actively seek out healthcare information in the form of videos. There are opportunities to engage with this platform and improve quality of information.

## **078 MAJOR AMPUTATION AUDIT; COMPLIANCE AGAINST NCEPOD GUIDELINES**

S Rehman, R Qaisar, B Darwish, SW Yusuf  
Royal Sussex County Hospital

**Introduction:** The incidence of clinically significant peripheral arterial disease in the UK is approximately 1000/million and 1-2% will require a major amputation. These procedures are associated with a high morbidity and mortality. NCEPOD guidelines were published in 2014 to address this important issue. This study is an audit against NCEPOD guidelines on outcomes of all major amputations performed at a tertiary care vascular unit.

**Method:** All patients who had a major amputation in calendar year 2014 were included. Outcomes were audited against NCEPOD guideline recommendations. Patients were followed up for at least one year following a major amputation.

**Result:** During 2014, 57 patients had 60 major amputations. Pre-op rehabilitation and nutritionist review was performed in 32 (53%) and 10 (17%) procedures respectively. 25 (42%) of the procedures had surgery within 48 hours of the decision to operate. 17 (28%) were performed on an elective list and 34 (57%) on a CEPOD list. The level of amputation was below knee in 13 (22%), through knee in 10 (17%) and above knee in 37 (62%) of the procedures. Thromboprophylaxis was appropriately prescribed in 53 (91%) of the cases. In-hospital mortality was 12% (NCEPOD national average is 12.4%).

**Conclusion:** This was the first major amputation audit against NCEPOD guidelines. NCEPOD guidelines are an effective tool to identify areas of practice that can be improved. We have put together a care pathway booklet for the major amputations to help improve performance and repeat audit is warranted to assess impact on practice and outcomes.

**Take-home message:**

NCEPOD audit is a useful tool to improve practice in major amputations.

## **079 PRE-OPERATIVE COMPUTED TOMOGRAPHY TO ASSESS BONE STOCK FOR TOTAL ANKLE ARTHROPLASTY**

S Wilson, M Ballal, N Vasukutty, A Pillai  
University Hospital South Manchester NHS Foundation Trust

**Introduction:** Bone cysts are a recognized cause of complications in total ankle arthroplasty (TAA). Reduction in the bone-implant interface can lead to implant migration, implant failure and post-operative pain. The aim of this study was to determine if there is a role for pre-operative CT scanning in TAA.

**Method:** Analysis of a single surgeon series of 13 CT scans was undertaken. CT scans were analysed to assess the incidence, site, size and number of periarticular cysts. Cysts with a dimension greater than 5mm were recorded and deemed significant.

**Result:** There were 7 left and 6 right-sided arthroplasties. Ten of the 13 CT scans demonstrated significant cysts (77%); 7 on the talus and 7 on the tibia. Six of the 7 (86%) tibial cysts as well as 6 of the 7 talar cysts were located medially on CT scanning. Three medial malleolus cysts required stabilization with metalwork, the remaining 2 cysts were centrally located. None of the talar cysts and 3 of the 7 (43%) tibial cysts were detected on plain radiograph. Overall, only 30% of cysts detected on CT scans were detected on the corresponding plain radiograph.

**Conclusion:** Pre-operative CT scanning of the ankle allows accurate assessment of subchondral bone cysts. This pilot study demonstrates that CT scans are more sensitive than plain radiographs in detecting bone cysts. CT scanning allows accurate assessment of size and location of bone cysts thereby aiding preparation for bone cuts as well as implant selection.

**Take-home message:**

This pilot study demonstrates that CT scans are more sensitive than plain radiographs in detecting bone cysts. CT scanning allows accurate assessment of size and location of bone cysts thereby aiding preparation for bone cuts as well as implant selection.

## **080 A CASE SERIES OF TOTAL HIP REPLACEMENTS FOR PAGET'S DISEASE**

T Jennison, T Batten, A Evans, J Keenan  
Plymouth Hospitals NHS Trust

**Introduction:** Paget's disease is disease of abnormal bone remodelling. The disorganised bony architecture and increased vascular supply increase the risk of blood loss and risk of transfusion. There is no current consensus on the type of hip arthroplasty to undertake in these patients. The aim of this case series is to determine rates of revision in patients with Paget's disease undergoing total hip replacements.

**Method :** Patients undergoing total hip arthroplasty for Paget's disease at a single centre between January 2012 and December 2014 were included. Patient case notes and radiographs were retrospectively reviewed.

**Result:** 32 patients with a mean age of 77.4 (range 68-88). There were 12 males and 20 females. There were 25 cemented total hip replacements, 1 hybrid and 6 uncemented total hip replacements. The mean drop in haemoglobin was 33.3 (8-59). Of the 32 patients, 14 (43.8%) patients received a blood transfusion. The mean length of stay was 7.8 days (2-15 days). There were no deaths in the year following total hip replacement. 1 (3.5%) revision arthroplasty was undertaken in this group in an uncemented implant due to instability.

**Conclusion :** In this case series total hip replacement is a successful procedure in patients with Paget's disease. This study would recommend a cemented total hip replacement to be undertaken. There is a high risk of patients requiring blood transfusion.

### **Take-home message:**

In this case series total hip replacement is a successful procedure in patients with Pagets disease. There is a high risk of patients requiring blood transfusion

## **081 THE INFLUENCE OF NEUROVASCULAR MULTIDISCIPLINARY TEAM MEETING ON THE MANAGEMENT OF CAROTID ARTERY STENOSIS IN PATIENTS WITH ISCHAEMIC STROKE**

SF Cheng, MM Brown, R Simister, T Richards

UCL Division of Surgery and Interventional Science / University College London Hospitals

**Introduction:** Multidisciplinary team (MDT) meetings have been established to have benefits to patients and that decision making has improved. A delay due to decision making through a MDT is in contradiction when urgent intervention is required, especially in patients with high grade carotid artery stenosis presenting with ischaemic stroke. The role of a neurovascular MDT meeting in carotid management has not been described in literature.

**Method:** A prospective observational study was performed from July 2014 – June 2015 at a comprehensive regional stroke service. Consecutive patients with suspected ischaemic stroke or TIA underwent carotid duplex ultrasonography, CT angiography, or contrast-enhanced MRA including the extracranial vessels. Significant carotid stenosis was defined as stenosis measuring  $\geq 50\%$  on either one of the modalities. Complex carotid stenosis patients were discussed at our two weekly MDT meetings. Changes in carotid examination or management after MDT discussion were registered. We are also presenting four unique cases where the discussion has changed the carotid management.

**Result:** Eighty-eight patients with carotid stenosis have been discussed at our neurovascular MDT meeting. At least 58 patients had a change in the management of the carotid stenosis after discussion. There was no delay in intervention if urgent carotid surgery was recommended.

**Conclusion:** A neurovascular MDT is considered to be a useful method to discuss patients with carotid artery stenosis and does not delay any urgent surgical intervention.

### **Take-home message:**

A neurovascular MDT is considered to be a useful method to discuss patients with carotid artery stenosis and does not delay any urgent surgical intervention.

## **082 DISEASE PRESENTATION AND SERVICE IMPLICATIONS AFTER INTRODUCTION OF A NATIONAL BOWEL CANCER SCREENING PROGRAMME**

E O'Connell (1), J McCarthy (2), M McCourt (1), E Andrews (1)

(1) Cork University Hospital, Wilton Cork (2) Mercy University Hospital, Cork

**Introduction:** Screening for colorectal cancer is conducted nationally for adults aged 60-69 under the "Bowel Screen" programme. The characteristics of disease presentation amongst patients referred for multidisciplinary discussion of screened lesions remains to be elucidated. We aimed to determine the nature of screened lesions presenting for multidisciplinary discussion in Cork University Hospital. In addition, we aimed to explore the implications of managing screened lesions for service provision within a regional cancer centre.

**Method:** Records of the colorectal cancer multidisciplinary meeting in Cork University Hospital since the commencement of Bowel Screen were reviewed. Details of the referred cancers including size, stage and location were recorded. Data were analysed using IBM SPSS 20.

**Result:** 81 patients were referred for MDT discussion between October 2013 and March 2016. 67.1% of screen detected patients were male and had a mean age of 67 years. 76.1% of cancers were left sided. AJCC Stage 1 and AJCC Stage 2 tumours represented 46.1% and 23.8% of screened cancers respectively. 23.8% of patients had nodal disease confirmed by resection while two patients had metastatic disease at referral. Cancers excised within polyps represented 28.5% of the group.

**Conclusion:** Colorectal cancer screening has succeeded in identifying early stage carcinoma, thus allowing curative resection and reducing the need for adjuvant chemotherapy. The preponderance of left-sided tumours has implications for service provision given the longer operative time required compared to right-sided tumours.

**Take-home message:**

This study provides helpful information to guide resource allocation and identifies areas when service capacity may be exceeded as screen-detected cancer incidence increases.