Conservative Versus Operative Treatment of Isolated Thoracolumbar Burst Fractures
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Introduction: Management of thoracolumbar burst fractures is a controversial topic. It is generally accepted that unstable fractures should be managed operatively, but there still remains no general consensus as to what represents a stable or unstable fracture.

Methodology: A retrospective analysis of thirty-six patients identified as having suffered an isolated thoracolumbar burst fracture and treated at The Alfred Hospital in Melbourne from 2007 to 2010 was performed. The Alfred’s orthopaedic database was used to identify eligible patients and data obtained from medical records and radiological imaging, including radiographs and computed tomography. In addition, all patients were contacted and asked to complete a questionnaire to assess functional outcome, pain, and satisfaction with treatment.

Results: Operative and conservative treatment displayed similar functional outcomes. Average low back pain scores were lower in the non-operative compared to the operative. Greater disability was also reported in the operative cohort. Mental scores were also assessed with non-operative compared to the operative. Greater disability was also reported in the operative cohort. Mental scores were also assessed with non-operative cohort reporting higher levels of mental functioning.

Conclusions: This review has added to the current popular opinion that non-operative treatment results has outcomes comparable with operative cohort reporting higher levels of mental functioning.

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Conclusions: This study reveals 8 key factors associated with failed day-case surgery: early patient contact, adequate patient selection, late arrival for pre-admission assessment, patient anxiety, patient mobilization, previous general anaesthesia, complications, and patient risk factors. Ongoing research is needed to further validate these findings.

Results: The use of reverse thermosensitive polymer (LeGoo) is a bloodless technique with excellent haemostasis to limit direct vessel trauma, particularly in arterial conduit patency was 91%. The single occlusion at 5 months occurred following needle site puncture pseudoaneurysm of a renal access fistula. LeGoo has been employed clinically during off-pump coronary artery bypass grafting.

Method: Single surgeon, single centre experience using LeGoo in peripheral vascular surgery between February and October 2010 was analysed. Case notes, operation notes and vascular imaging data for all patients were reviewed.

Results: LeGoo was used in 13 anastomoses in 11 patients. A satisfactory bloodless field without the use of conventional occlusion devices was achieved in 92% of anastomoses. At a median of 36 weeks follow-up, total conduit patency was 91%. The single occlusion at 5 months occurred following needle site puncture pseudoaneurysm of a renal access fistula.

Conclusion: In this small series, LeGoo was seen to be safe and effective in the provision of a clamp-free bloodless field in the context of peripheral vascular surgery. Prospective and comparative study is necessary to determine the role of this technology and its performance against conventional vascular clamps.

Cerebral Hyperperfusion Syndrome
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Introduction: Cerebral hyperperfusion syndrome (CHS) is a preventable cause of haemorrhagic stroke after carotid endarterectomy. There is no consensus on blood pressure thresholds, choice of antihypertensive or duration of treatment.

Method: A systematic review of the PubMed database was performed, yielding 36 relevant articles.

Results: Following carotid endarterectomy, the incidence of CHS was 1% and intracerebral haemorrhage 0.5%. The cumulative incidence of cases rose sharply above a sBP of 150mmHg. The mean sBP of CHS cases was 189mmHg (95% CI 183-196mmHg) at presentation. 92% of CHS occurred in the first week with a median time to presentation of 5 days (IQR 3-6 days). 36% presented with seizures, 31% with hemiparesis and 33% with both. The proportion of patients with severe hypertension was significantly higher in cases than post-CEA controls (p<0.0001). Three large case-control studies identify post-operative hypertension as a risk factor for intracerebral haemorrhage.

Conclusion: There is level 3 evidence for the prevention of intracerebral haemorrhage through control of post-operative blood pressure. We suggest a definition for cerebral hyperperfusion syndrome, blood pressure thresholds, duration of monitoring and a post-operative blood pressure control strategy for validation in a prospective study.

Cerebral Hyperperfusion Syndrome
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Objectives: Carotid endarterectomy (CEA) has level 1 evidence for prevention of embolic stroke in high-risk carotid stenosis. Despite this, no studies as yet have directly evaluated the patients’ perspective of this treatment. Here, for the first time, we determine patient satisfaction and perception of CEA.

Methods: Consecutive patients were identified from a prospectively-maintained carotid database. A validated telephone questionnaire was conducted. Questions related to pre-operative symptoms, experience of procedure and future interventions.

Results: Of the 192 patients included, 136 completed the telephone questionnaire (71% response rate). 92% were satisfied with the explanation they received from their surgical team. However, despite pre-operative information-giving, less than half (48%) understood that the operation was aimed at preventing future strokes. 85% of patients received CEA under local anaesthesia (LA), of whom 16% reported severe or unbearable pain. Most patients would repeat CEA if necessary (83%) and 67% stated a future preference for LA CEA. The majority of patients (96%) were satisfied with their treatment overall.

Conclusions: This research has shown that the patients’ perspective of CEA is mostly positive. However, greater emphasis must be placed on patient understanding and intra-operative pain management to further improve quality of care.

Analysis of Changes in the 3-Dimensional Anatomy of Palatal Shelves of Unilateral Cleft Lip & Palate Patients Following Vomer Flap Repair
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Introduction: Cleft palate +/- lip incidence is 1:1000 live births, where babies can encompass feeding, aesthetics, breathing, speech, articulation, hearing and psychological problems. Together with lip repair, the vomer flap closes the anterior palate; resulting in subsequent narrowing of the posterior palatal cleft. However, it is unclear whether this is a result of palatal shelf growth, shelf angulation changes or both.

Aims: To determine the changes in palatal shelf dimensions and angulations following a vomer flap in UCLP patients.

Methods: A retrospective longitudinal 3D analysis of models from 25 patients were assessed for palatal shelf length, angulations, cleft width measurements using Seckel’s landmarks. Previous studies have used manual Vernier’s callipers to record this. 3D scanners are more accurate in providing reproducible measurements, hence was utilised in this study.

Results: 56 casts were scanned using the 3D Picza Laser scanner and then a single investigator recorded measurements using Seckel’s reference points along with the cleft widths, palatal widths and Lengths.
Discussion & Conclusion The changes in palatal shelf length following anterior palate repair has shown to be significant with a SPSS paired T-test (95% confidence interval, p<0.05), although they are relatively small changes. This effect has not been commented on in previous literature.

0029 RISK PREDICTION FOR COMPLICATIONS FOLLOWING PANCREATICODUODENECTOMY
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Background: Pancreaticoduodenectomy is associated with significant morbidity. The aim of this study was to identify clinical predictors for complications following pancreaticoduodenectomy.

Method: A review of 50 consecutive patients that had undergone pancreaticoduodenectomy between 2006 and 2008 was performed. Patient age, co-morbidity, pre-operative bilirubin and haemoglobin, pre-operative biliary drainage, interval to surgery, need for peri-operative blood transfusion and histological stage were evaluated. Logistic regression was used to determine clinical predictors for post-operative complications.

Results: 50 patients (26 male) median age 65.5 years (range 38-84) were assessed. All patients presented with jaundice. 86% had undergone pre-operative biliary drainage (median bilirubin 18.5 μmol/l). 22% had stage II and 68% had stage III disease. 14 patients had early complications (pancreatic fistula–7; chest infection–3; abdominal collection–2; ileus–1; sepsis = 1). There was one treatment related death. An interval to surgery of >4 weeks was associated with an increased rate of post-operatively complications (p=0.029). No other clinical predictors for complications were identified.

Conclusions: A delay to surgery is associated with an increased rate of complications following pancreaticoduodenectomy.

0031 IS ROUTINE GROUP AND SAVE IN PATIENTS PRESENTING WITH RIGHT ILLAC FOSSA PAIN COST EFFECTIVE?
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Introduction: Group and Save (G&S) is often requested routinely for patients admitted with Right Iliac Fossa (RIF) pain. Current transfusion guidelines only focus on elective surgery, and there is a lack of guidance for emergency admissions.

Objective: To determine the incidence of blood transfusion in patients who present with RIF pain and hence the cost effectiveness of routine G&S.

Method: A retrospective review of the medical records of all adult surgical admissions to a District General Hospital with RIF pain in a 6 month period.

Results: A total of 245 patients were identified. G&S was requested in 188 (77%) on admission, costing £3.50-£5 per patient depending on serum antibodies. Operations were performed on 106 patients (43%). Only 3 patients (1.2%) needed blood transfusion. None required emergency transfusion. None of the 57% of patients treated conservatively required transfusion.

Discussion: RIF pain is a very common presentation, but these patients rarely require transfusion. Routine G&S has resource implications, and is unnecessary in over 98% of patients. It should be reserved only for those patients at high risk of needing a blood transfusion.

0038 MERCURY INJECTION INTO BREAST TREATED BY THERAPEUTIC MAMMOPLASTY
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Introduction: Self-injection of mercury into breast has not been reported before.

Case report: A 45-year-old woman presented following self-injection of metallic mercury into her both breasts. Her past medical history included personality disorder, acid reflux and self-harm. Her observations were stable, GCS was 15/15, and there was no focal neurological deficit. Breast examination revealed two puncture sites located 2 cm above the nipples bilaterally, associated with bruising. Routine haematological and biochemical investigations were unremarkable. Chest X-ray showed bilateral metal deposits. Decisions of multidisciplinary team involving radiologists, toxicologists, psychiatrists and breast surgeons favoured surgery for removal of mercury and monitoring of mercury levels. An exploration after eight hours, aided by image intensifier, confirmed that mercury was not localised to the sites of injection any more. The procedure was postponed. Double-view mammogram showed diffuse spread of mercury droplets. She subsequently underwent excision of large areas of affected breast tissue, followed by bilateral mammoplasty. Serum mercury level was 92.1 nmol/l on day 2 (normal <30nmol/l).

Discussion: The treatment options for mercury injection into breast include surgery and use of chelating agents. Wide excision of affected breast tissue followed by mammoplasty helps avoid mastectomy and lessens the need for systemic treatment.

0041 OCULAR TRAUMA: THE BURDEN OF PREVENTABLE EYE INJURY
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Aims: To ascertain the demographic characteristics of patients presenting with ocular trauma, the risk factors associated with it and analyse the role of preventative eyewear on the current burden of eye injuries.

Methods: A retrospective case note analysis of eye casualty department-treated patients with ocular trauma over a period of six months was carried out at Ninewells hospital, Dundee. The main investigating parameters included the cause, type, location, main activity/object and time of eye injury. Patient’s awareness of risk and safety were also collated.

Results: A total of 154 cases were analysed. Men presented with ocular trauma more often than women (61% versus 39%). The most common cause was accidental (82.5%), involving a blunt-type, closed globe injury (87.7%). The most frequent object/activity causing injury was sports-related (70.1%). Young men, within 15–24 years age commonly presented with potentially preventable sports-related eye injuries (n=34). There was a greater uptake of protective eye wear when available amongst women (66.7%) than men (46.2%).

Conclusion: Ocular trauma continues to be an important cause of avoidable visual morbidity. This study demonstrates the need for effective preventative intervention, targeting vulnerable groups, namely young men engaging in sports-related activity to significantly reduce the burden of serious ocular injury.

0044 A RETROSPECTIVE ANALYSIS OF COMPLICATIONS FOLLOWING REVERSAL OF LOOP ILEOSTOMY
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Introduction: We undertook a retrospective analysis of patients that underwent reversal of loop ileostomy. The aim was to examine the post-operative morbidity and mortality and identify possible precipitating factors.

Methods: All loop ileostomy reversals performed between December 2006 and May 2008 at a single UK district general hospital were included for study. Fisher’s exact test and the independent samples t-test were used for statistical analyses.

Results: 41 patients were identified and included for analysis. 39 were planned elective procedures. The male to female ratio was 24:17 (1.4:1). The mean age was 62 years (range 22-83). Post-operative complications occurred in 18 (44%) patients. The most common complication was wound infection in 7 (17%) patients. There was a single case of anastomotic leak and no deaths. Age at time of surgery, grade of the surgeon, operative time, closure technique (stapled or hand sewn) and time between formation and closure of the ileostomy were not significant predictors of post-operative morbidity.

Conclusions: The morbidity associated with closure of loop ileostomy is an important factor when contemplating the risk and benefit of ileostomy formation to defunction distal anastomoses. Patient factors are likely to be