

0944: PREDICTIVE VALUE OF CRP/ALBUMIN RATIO IN MAJOR ABDOMINAL SURGERY

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Aim: Hypoalbuminaemia is predictive of surgical site infection, while CRP is an established marker of an acute inflammatory process. Ranzani et al. demonstrated that CRP/albumin ratio acts as an independent risk factor for mortality at 90 days in septic patients. The aim of our study was to evaluate whether CRP/albumin ratio at 24 hours post-operatively was predictive of surgical site infection.

Methods: A prospectively maintained surgical site infection database with nurse led 30 day follow up was retrospectively analysed to determine the predictive value of CRP/Albumin ratio at 24 hours post-operatively on surgical site infection. Only patients undergoing emergency abdominal surgery were included, and who had pre op, 24 and 48-hour Albumin and CRP values. Fischers exact test was used for statistical analysis using SPSS 20.

Results: 67 patients were included in the study period, who underwent emergency abdominal surgery from 2010–2012. Thirty patients had a 24 hour post-operative CRP/Albumin ratio of ten or greater. CRP/Albumin ratio of 10 or greater is associated with an increased risk of SSI compared to 9 or less in emergency abdominal surgery (69% SSI rate versus 33%, $p < 0.004$).

Conclusion: CRP/Albumin ratio is predictive of surgical site infection in abdominal surgery.

0962: PATIENT SATISFACTION FOLLOWING FREE VOLUNTARY SURGICAL CARE IN NEPAL

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Aim: In the hectic environment of a charity surgical camp, it is difficult to focus on patient-centred care. This study intended to objectively assess patient satisfaction in a surgical camp run by Health Partnership Nepal (HPN).

Methods: A 3-day surgical camp (2014) formed a part of a multidisciplinary team treating an impoverished remote community living in an austere environment in Dhading, Nepal. HPN consisted of English and Nepalese doctors. All surgical patients were subject to a questionnaire survey conducted by an independent personnel following completion of treatment. Areas assessed were communication, confidence in care, postoperative pain control, and overall satisfaction, based on a 3-point scoring system (excellent, average, poor)

Results: 27 consecutive patients were surveyed: 6 had local anaesthesia for skin lesion excision, 21 (9 children) were transferred to tertiary care for regional or general anaesthesia for various surgeries. Excellent scores were achieved in communication 22/27 (81%), confidence in care 27/27 (100%), postoperative pain control 21/27 (78%), and overall satisfaction 26/27 (96%). The lowest score was postoperative pain control regarded as poor in 3/27 (11%) – two hydrocoele repairs, one laparoscopic cholecystectomy. All surgeries were successful without immediate complication.

Conclusion: Patient-centred care is achievable within a free voluntary healthcare mission.

Posters: Neurosurgery

0028: A SINGLE CENTRES EXPERIENCE OF CHILDHOOD CRANIOPHARYNGIOMAS, A TEN YEAR REVIEW

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Aim: Craniopharyngiomas are rare paediatric brain tumours. Although gross total resection has been reported in up to 75% of cases, there is an associated high incidence of long term complications. We report our experience of childhood craniopharyngiomas over a 10 year period.

Methods: We performed a single centre, retrospective review of children (<16 years) undergoing surgery for craniopharyngioma between 2000–2010. Case notes were reviewed for demographics, presenting

symptoms, surgical management and for calculation of pre and post-operative Modified Rankin scores.

Results: 11 children, aged between 5–16 years, undergoing surgical resection of a craniopharyngioma were identified. Presenting symptoms most commonly included headache (73%), endocrine disturbance (64%) and vomiting (45%). 9 patients had a craniotomy, with the remaining children undergoing transphenoidal resection. Post-operative imaging revealed residual tumour in 2 patients. During follow-up 2 patients (11%) were identified as having recurrent tumour. All patients experienced a degree of pituitary dysfunction post-operatively with 45% also experiencing visual disturbance. Post-operative Modified Rankin scores improved in 3 patients, remained stable in 4 patients and worsened in 4 patients.

Conclusion: Surgical resection of craniopharyngiomas has a high rate of post-operative morbidity. We identified a general trend toward improved outcomes in patients with subtotal resections.

0049: A SERIES OF SYSTEMATIC REVIEWS INDICATE EVIDENCE IS LACKING FOR FOUR COMMONLY PERFORMED NEUROSURGICAL INTERVENTIONS

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Aim: To determine if existing literature was adequate to assess efficacy of five commonly undertaken neurosurgical interventions: 1) pre-operative vs. post-operative heparin thromboprophylaxis for cranial surgery; 2) lumbar subarachnoid drainage for cranial cerebrospinal fluid leak; 3) normobaric oxygen therapy for pneumocephalus; 4) induced hypertensive hypervolaemic haemodilution to prevent vasospasm post-subarachnoid haemorrhage (SAH); 5) nimodipine to prevent vasospasm post-SAH.

Methods: For each intervention the published literature was systematically reviewed using Cochrane Database of Systematic Reviews, Register of Controlled Trials, MEDLINE, EMBASE and OpenSIGLE. Meta-analytic, interventional and observational studies were included. Bias was assessed using a standardized domain-based tool.

Results: 48 studies met inclusion criteria. These were of insufficient quality to assess the efficacy of interventions 1–4; only heterogeneous observational data or poor quality pseudorandomised trials existed. Studies of HHH were of higher quality but did not demonstrate a therapeutic effect. Nimodipine was effective, demonstrated by meta-analysis of nine RCTs.

Conclusion: Despite decades of research, there is insufficient evidence to inform best practice in most of these commonly encountered neurosurgical scenarios. Neurosurgeons must rigorously conduct and report RCTs of basic neurosurgical interventions as a priority. The British Neurosurgical Trainee Research Collaborative (www.bntrc.org.uk) has developed a successful collaborative research model to address this.

0054: "THE WRITING IS ON THE WALL", IMPROVING PERI-OPERATIVE ANTIBIOTIC PROPHYLAXIS IN NEUROSURGERY

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Aim: Prophylactic antibiotics are of great importance in peri-operative care, especially in neurosurgery given the immune-privileged nature of the CNS. Failure to administer correct antibiotics can result in devastating infection. Anecdotally, compliance with trust guidelines for prophylactic antibiotic use in neurosurgical theatres was thought to be inadequate.

Methods: 65 patients who underwent neurosurgery requiring prophylactic antibiotics were audited for compliance with trust guidelines. 20% of patients were not compliant with 14% not receiving a second dose (required for operations lasting 6 hours), 3% receiving incorrect antibiotics and 3% not receiving antibiotics. Posters outlining trust guidelines for prophylactic antibiotic use were created and displayed in theatres to prompt administration followed by re-audit.

Results: 60 neurosurgical patients were audited after posters had been in theatres for a month. A large improvement was demonstrated, with compliance improved from 80% to 97%. All patients received the correct antibiotics for the procedure undertaken with only 3% not receiving additional doses for cases lasting over 6 hours.