Conclusions: A gap has been identified in the training of modern surgical trainees providing a niche for the development of educational strategies to address open conversion. These strategies may be in the form of courses, surgical trainee teaching, online and video learning materials, post CCT training, fellowships and centralising uncommon cases.

Medical student poster of distinction prize session

0159: SIGNIFICANT VARIATION IN BLOOD TRANSFUSION PRACTICE PER- SISTS FOLLOWING IDIOPATHIC ADOLESCENT SCOLIOSIS SURGERY

S. O’Malley 1, C. Aquina 1, F. Fleming 2, N. O’Malley 1, 1University of Rochester, New York, USA; 2University of Limerick, Limerick, Ireland.

Aim: We investigated the factors associated with variation in blood transfusion utilization following primary spinal fusion for idiopathic adolescent scoliosis (IAS) and its association with infectious complications.

Methods: Data was extracted from the Statewide Planning and Research Cooperative System (SPARCS), Using International Classification of Diseases (ICD-9), all patients included had a diagnosis of IAS and underwent spinal fusion from 2000 to 2013. Bivariate and mixed-effects logistic regression analyses were performed to assess the factors associated with receiving a perioperative allogeneic red blood cell transfusion.

Results: Among 6,230 patients who underwent IAS surgery, 27.77% of patients received a perioperative blood transfusion. After controlling for patient, surgeon, and hospital-level factors, significant variation in transfusion rates was present across both surgeons and hospitals with a 13-fold difference observed in transfusion rates between the lowest and highest utilization for hospitals and a 4-fold difference observed for surgeons (p < 0.0001).

Conclusions: Significant variation in perioperative blood transfusion utilization exists at both the surgeon and hospital level. These findings are unexplained by patient-level factors and other known surgeon and hospital characteristics, suggesting that variation is due to provider preferences and/or lack of standardized transfusion protocols.

0035: A SYSTEMATIC REVIEW ON THE USE OF VACUUM ASSISTED CLOSURE THERAPY FOR THE CLOSURE OF ENTEROCUTANEOUS FISTULAE

A. Misky 1, A. Hotouras 1, J. Murphy 2, C. Bhan 1, 1University College London, London, UK; 2St Mark’s Hospital, London, UK.

Aim: Enterocutaneous fistulae (ECF) are one of the most challenging surgical complications. The current treatment is surgical closure, associated with significant morbidity and mortality. Vacuum-assisted closure (VAC) has been used for persistent abdominal wounds for several years. This study aims to investigate whether current literature supports the use of VAC for ECF.

Method: A PubMed search of “enterocutaneous fistula” and “vacuum assisted closure” was performed in December 2014. Results were restricted to studies involving humans with available abstracts and full texts, written between 1950-2014. Outcomes analysed included rate of closure, follow-up, morbidity and mortality.

Results: 10 studies with 151 patients were examined. Median spontaneous closure rate was 64.6% (7-100), which occurred within 58 (12-90) days. Follow-up was mentioned in 3 of the 10 studies, where the patients were followed-up for 3, 20 and 28.5 months. No complications were identified in all except one study, which reported pain and fistula recurrence in a minority of patients.

Conclusions: The literature suggests that VAC is a promising tool for the treatment of uncomplicated ECF secondary to surgery. Further retrospective and prospective studies are necessary to establish true benefit and whether VAC is advantageous compared to standard surgical therapy.