

PMO-064 CAN INTESTINAL FAILURE DUE TO FISTULA BE MANAGED SAFELY OUT WITH THE NATIONAL CENTRES?

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Introduction Type II Intestinal Failure (IF) requires multidisciplinary management at significant cost. Up to 50% of these patients will progress to home parenteral nutrition (PN). The aim of this study was to assess the outcomes of patients with type II intestinal failure due to small bowel fistulae in a tertiary referral centre and compare these with published data.

Methods Patients were identified from a prospectively collected database (January 1998–December 2009). Data were analysed retrospectively. Data were split into groups by diagnosis: Acute pancreatitis, Upper Gastrointestinal, Colorectal, Hepatobiliary, Inflammatory Bowel Disease (IBD) and “other” (trauma, mesenteric ischaemic, failed PEG/PEJ, vascular, gynaecology). Data were analysed using SPSS V.17.1; Pearson χ^2 test and ANOVA, $p=0.05$ denoting significance.

Results 190 fistulas in 186 patients (median age 64 years (20–96), M:F 103:83) required PN. 75 (39.5%) developed following emergency admission, 63 (32.2%) following elective admission and 52 (27.4%) were in patients transferred from other hospitals because of the fistula. 160 (84.2%) fistulas developed following surgery. Patients undergoing major HPB procedures were statistically more likely to develop a post-op fistula ($p=0.031$). 113 (59.5%) fistulas settled with conservative treatment. 34 (18%) patients died before any surgery. Overall mortality was 21% (39 of 186 patients). Patients with HPB pathology or those transferred from other hospitals were statistically more likely to die as a result of their fistula ($p=0.007$). Patients with IBD, colorectal pathology and those transferred from other hospitals were more likely to require surgical intervention for their fistula ($p=0.007$). Patients in the “other” diagnosis category were statistically more likely to require a definitive operation ($p=0.02$). 11 fistulas required early open operation within 1-month. One due to underlying malignancy and ten to control sepsis. Following early operation one patient died, two required permanent home PN and five settled after open drainage of sepsis only. Two patients went on to further definitive surgery. 30 definitive operations were performed. Post operatively, four patients died, two required permanent HPN and three fistulas recurred in two patients, one of whom required further surgery.

Conclusion Reasonable outcomes from intestinal failure can be achieved out with the national referral services but a significant amount of resource is needed, including a multidisciplinary nutrition team, interventional radiology and a surgical team accustomed to dealing with such cases.

Competing interests None declared.

PMO-065 REPAIR OF FRACTURED CENTRAL VENOUS CATHETERS FOR PARENTERAL NUTRITION: TECHNIQUES AND RISK OF INFECTION

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Introduction Tunnelled central venous catheters (CVCs) are the best method of vascular access for long-term parenteral nutrition. Failure of intravenous access can necessitate emergency admission. Removing and replacing CVCs is painful, risks infection and venous thrombosis, and uses costly healthcare resources. Simple techniques to repair fractures in the external part of CVCs can prolong CVC life but repairs have been associated with increased rates of catheter-related bloodstream infection (CRBSI).

Methods Between January 2010 and December 2011 all repairs of CVC fractures were recorded. Fractures were defined as “external” when only the outer sheath of the CVC was ruptured, and “full” when both inner and outer sheaths of the CVC were ruptured, with evidence of leakage. External fractures were repaired with waterproof, non-absorbent tape. Full fractures were repaired with the manufacturer’s repair kit, including a metal spike inserted into the lumen across the new join. We recorded rates of successful repair and any instance of CRBSI within 30 days of the repair.

Results

Fracture type	Repair success (%)	Infection rate (%)	Detail	Fracture rate/1000 catheter-days
Full	34 (88)	1 (3)	Klebsiella grown @ 30 days	0.2
External	16 (100)	0	–	0.09
Total	50 (98)	1 (2)	–	0.3

Conclusion CVC fracture repair is effective and safe. Repair of external fracture is easily done with waterproof, non-absorbable tape. Formal repair can prevent emergency admission and act a bridge to planned CVC replacement. It may also have a role in further prolonging the useful life of tunnelled CVCs. In our patient cohort repair is not associated with subsequent infection.

Competing interests None declared.

REFERENCE

- Lundgren IS, Zhou C, Malone FR, *et al*. Central venous catheter repair is associated with an increased risk of bacteremia and central line associated bloodstream infection in pediatric patients. *Pediatr Infect Dis J*, 2011.

PMO-066 SALVAGE OF OCCLUDED CENTRAL VENOUS CATHETERS IN LONG TERM PARENTERAL NUTRITION PATIENTS: TECHNIQUES & OUTCOMES

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Introduction Central venous catheter (CVC) occlusion is a recognised complication of parenteral nutrition (PN). Various techniques are advocated to salvage the CVC but forcing debris from fibrin or precipitate into the bloodstream risks causing catheter-related bloodstream infection (CRBSI) or embolism. We decided to assess the efficacy of simple physical techniques to salvage an occluded CVC, and the rate of complications described.

Methods All CVC occlusions between January 2010 and December 2011 were reviewed. Occlusions were “total”, when the CVC could not be flushed, or “partial”, when there was resistance to flushing. The cause of occlusion was recorded together with the time from symptom onset to attempted salvage, age of the CVC, techniques and instillations used to unblock the CVC, and outcomes. Confirmed cases of CRBSI occurring within 30 days of CVC salvage were recorded. Techniques included: manipulation of the external segment of the CVC to disrupt visible material (M); saline flush of the CVC with a gentle, pulsing action using a 2.5 ml Luer lock syringe for 20–60 min (SF); instillation of alcohol to dissolve lipid (A); pulsed flushing of urokinase without instillation (U); physical clearing out of the CVC hub with a 21G needle to remove any obstructing material (HC).

Results 38 occlusions occurred in 23 patients giving an occlusion rate of 10.9% (0.25 occlusions/1000 catheter days): 11 partial occlusions in five patients and 27 total occlusions in 19 patients. See Abstract PMO-066 table 1 below: The rate of CRBSI in this group