Conclusion Administering TPN via a single giving set over a period >24 h does not increase the incidence of central venous catheter associated infections.

Competing interests None declared.

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PMO-069 LINE SEPSIS RATES ARE SIGNIFICANTLY IMPROVED IN PARENTERAL NUTRITION PATIENTS BY HAVING A NUTRITION NURSE

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Introduction Recent UK NCEPOD data highlights catheter line sepsis as a major complication of Parenteral Nutrition (PN). We hypothesise that a Specialist Nutrition Nurse may improve line sepsis rates by educating ward staff on line care. Our aim was to evaluate line complications in patients treated at Guy's & St Thomas' Hospitals before and after this intervention.

Methods Prospective dual-centre cohort study of patients started on PN over two 12-month periods (2005; 2010). Clinical data collected via pro forma, microbiology data via Electronic Patient Records.

Results 221 patients were recruited (141 in 2010, 80 in 2005). From the 2010 cohort, 90 were ward-based, 57 on ICU. Duration of PN ranged from 1 to 171 days (mean 17). Access was established by central line (65%) or peripherally-inserted central (PICC) lines (35%). Use of PICC lines had increased since 2005 (84% central vs 16% PICC). The incidence of line sepsis was significantly lower in 2010 than in 2005 (11% vs 31%, Fisher's test p=0.0002). In 2010 9/15 cases of line sepsis were confirmed by blood/line tip culture. Line complications were more likely to occur in patients on wards than ICU (34% vs 2%, Fisher's test p<0.0001). By contrast, rates of confirmed line sepsis were not significantly influenced by line type (Fisher's test p=0.5).

Conclusion This dual-centre audit demonstrates a significant reduction in catheter-related sepsis between 2005 (31%) and 2010 (11%). This is likely due to the introduction of a Nutrition Nurse to facilitate monitoring and line care in PN patients. The discrepancy in line sepsis rates between wards and ICU indicates that there is still scope to improve line care on wards. Increased use of peripherally-inserted feeding lines has had no impact on line sepsis rates.

Competing interests None declared.

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Enteral nutrition

PMO-070 FREKA® PEXACT PLACEMENT IN PATIENTS WITH HEAD AND NECK CANCER—THE CITY HOSPITAL EXPERIENCE

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Introduction Patients with head and neck cancer are at risk of malnutrition as a direct result of the tumour or as a result of treatment, that is, chemo-radiotherapy. Oral intake may not be enough to maintain nutrition, therefore many patients receive enteral feeding via a percutaneous endoscopic gastrostomy (PEG). A standard pull-through PEG may expose patients to the risk of tumour seeding within the tract in patients with oro-pharyngeal and oesophageal cancers. Current British Society of Gastroenterology guidelines recommend consideration for a direct gastric puncture technique and gastropexy for percutaneous feeding tube placement, with the technique being considered mandatory in those patients being treated with curative intent. The Freka® Pexact (Fresenius Kabi, Germany) set was used in our setting. We aimed to review our practice of this technique with particular attention to safety and complication rates with this method of PEG insertion.

Methods Patients having a Freka® Pexact placement for nutritional support at City Hospital, Birmingham, UK from 2009 to 2011 were identified using the ADAM® medical documentation system (Fujinon Europe GmbH, Willich, Germany) and the Nutrition team logs. Complications, peristomal infection and 30-day mortality were documented after review of case notes and liaison with Community Nutrition Nurses.

Results A total of 30 patients having Freka® Pexact placement were identified. The insertion was carried out as a day case procedure in 93.3% (n=28) of cases. Of these 76.7% were male (n=23). The mean age of patients was 58 years (range 35–81). All Freka® Pexact (n=30) were inserted for nutritional support in patients with head and neck cancer. Prophylactic antibiotics were received by 83.3% (n=25). Success of Freka® Pexact placement was 100% (n=30) with no immediate complications or procedure related mortality. Two patients (6.7%) were admitted for PEG related problems within 30 days. Peristomal infections occurred in 36.7% (n=11) of cases. The most common problem, other than infection, post-procedure was sutures becoming untied or falling out, this occurred in 16.6% (n=5) of patients, with consequence. There were no deaths at 30 days.

Conclusion Pexact insertion is safe and can be performed as a day case procedure. There are minimal complications. Our results compare favourably with those in the literature. This technique should be used in all patients having a PEG inserted for nutritional support in head and neck cancer.

Competing interests None declared.

PMO-071 ELEVEN YEAR REGIONAL UK COHORT STUDY REVEALS DISTINCTLY DIFFERENT TEMPORAL TRENDS BETWEEN NEONATAL AND PAEDIATRIC HOME ENTERAL TUBE FEEDING

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Introduction Home enteral tube feeding (HETF) is increasingly being used to provide nutrition support (NS) for children to promote growth and development. It is unclear if there are differences in the extent of use and temporal usage trends between neonatal and paediatric clinical practice.

Aims To determine:

1. Absolute numbers of children and neonates discharged on HETF from the regional (SE Scotland) tertiary paediatric and neonatal units, the temporal trends in both paediatric and neonatal HETF over an extended period, and the comparison of these trends.
2. The numbers of neonates transferred on enteral tube feeding (ETF) from the regional neonatal to the regional paediatric unit over the last 2 years of the time period and their outcome in terms of need for HETF.

Methods A retrospective cohort study (database and clinical note review) to compare numbers of children within the population of 838 573 in Lothian discharged on HETF from the single SE Scottish regional neonatal unit and the single SE Scottish regional paediatric unit, and their inter-relationships. All children and neonates discharged on HETF over the study period 1 July 2000–30 June 2011 were included. The fate of neonatal transfers requiring ETF to the paediatric centre was studied over the period of 1 July 2009–30 June 2011.

Results 485 Lothian children were discharged on HETF from the regional paediatric hospital (paediatric HETF) compared with 114 from the neonatal unit (neonatal HETF) over the same time period. Over the study period a rise in numbers requiring paediatric HETF was observed (average of 34 per year in 2000–2005 increasing to 55 per year in 2006–2011), however there was a decreasing number requiring neonatal HETF (average of 16 per year in 2000–2005 decreasing to 8 per year in 2006–2011). HETF was primarily used short term in the neonatal group for immaturity alone. During the 2-year period of the study 7/2009–6/2011, 20 neonates were transferred to the regional paediatric unit on ETF; 11 (55%) were subsequently discharged on HETF from the paediatric unit, but these neonatal transfers only accounted for 10% of the total of 103 paediatric HETF discharges.

Conclusion These novel data firstly demonstrate that the incidence of HETF usage on discharge from a UK paediatric regional centre continues to increase while that from the neonatal unit serving the same region is falling, and secondly that sick neonates transferred on ETF make up only a small number of incident paediatric HETF cases.

Competing interests None declared.

PMO-072 A 1 YEAR TWO PHASE PROSPECTIVE PROJECT LOOKING AT NUTRITIONAL RISK IN REACTIVE VS ELECTIVE NASOGASTRIC ENTERAL FEEDING IN HEAD AND NECK CANCER PATIENTS UNDERGOING RADICAL (CHEMO)RADIOTHERAPY

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Introduction Pre 2009 head and neck cancer (HNC) patients requiring enteral tube feeding during radical (chemo)radiotherapy at our regional cancer centre were admitted reactively in a nutritional "crisis" and fed via a nasogastric(NG) tube.[1] Audit resulted in a 1-year service improvement grant for a Specialist Dietitian to proactively support HNC patients "from pre-treatment until rehabilitation is complete".[2] The aim of this 1-year (2009–2010) two-phase prospective project was to reduce nutrition related crisis admissions, malnutrition and refeeding syndrome, thereby reducing length of hospital stay (LOS) from an average of 13 days[1] while aiming to improve patient experience and outcome.

Methods Phase1 (9 months): All patients with HNC (squamous cell carcinoma) were included. Nutritional status (MUST score), %weight loss and swallow ability was recorded for all patients before, during and after radiotherapy treatment. Patients were admitted reactively with inadequate nutritional intake and/or 5% weight loss. Interim review of phase 1 highlighted that oral cavity, oropharyngeal, nasopharyngeal, hypopharyngeal carcinomas and unknown primary tumours were at nutritional risk from weeks 2 and 3 of radiotherapy, leading to reactive admissions for NG feeding. Phase 2 (3 months) involved patients with these tumours admitted electively for NG feeding in week 3 radiotherapy. All admitted patients were followed up for 6 months.

Results Refeeding risk, number of days until nutritionally fit and LOS were all significantly reduced in phase 2 compared to phase 1.

Conclusion This data demonstrates that when appropriately funded, a specialist dietetic service working as part of a multidisciplinary team in HNC, by electively admitting high nutritional risk patients for NG feeding, can significantly reduce clinical risk and costs. As a result of clinical benefits and cost savings our Trust made the service improvement funding substantive.

Competing interests None declared.

Abstract PMO-072 Table 1

	Total number of patients	Total patients admitted	% Patients at risk of refeeding syndrome on admission	Average number of days from admission until full nutritional requirements met	Average LOS days
Audit[1] (2006–2008)	223	32	94	11 (SD±4.9)	13 (SD±5.1)
Phase 1	83	32	75	8.2 (SD±5.4)	9.3 (SD±6.1)
Phase 2	23	9	33	3.2 (SD±2.7)	4.3 (SD±5.2)
p Value (phase 1 & 2)			0.04*	0.01**	0.0065**

*Fisher's exact test, two-tailed.
**T-test, unpaired, two-tailed.

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PMO-073 POST-OPERATIVE ENTERAL NUTRITION AND RECIRCULATION OF JEJUNAL EFFLUENT IN THE MANAGEMENT OF A PARADUODENAL HERNIA: A CASE REPORT

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Introduction Short gut secondary to surgical resection often requires post-operative total parenteral nutrition. We present a case of ischaemic gut secondary to a paraduodenal hernia. Post-operative nutritional requirements were met using enteral feeding via a feeding jejunostomy and recycling end jejunostomy effluent.

Methods Case: A female presented with abdominal pain and metabolic acidosis. A double contrast abdominal computer topography scan revealed necrotic small bowel secondary to an internal hernia into the right paraduodenal fossa. She was found to have 180 cm of infarcted jejunum and ileum. After resection of this segment an end jejunostomy was formed along with a closed mucus fistula from proximal ileum. 50 cm proximal to this a feeding jejunostomy/ileostomy was constructed. Early jejunal feeding with elemental feed was commenced on day 1. Loperamide and codeine were added to slow intestinal transit and promote absorption. On day 5, bile excreted via her jejunostomy was recycled via her feeding