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PMO-080 HOME ENTERAL TUBE FEEDING VIA PERCUTANEOUS JEJUNOSTOMY: A 5-YEAR UK REGIONAL STUDY OF TRENDS AND OUTCOMES

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Introduction NHS Lothian home enteral tube feeding (HETF) point prevalence figures reveal that of the 328 adults on HETF in the Lothian region, 18 (5.4%) are being fed via jejunostomy. The aims of this study were to establish the trends in jejunostomy feeding over a 5-year period and to identify the associated complications.

Methods A retrospective review of the regional HETF database was carried out to identify all adults discharged home to the Lothian region on jejunal feeding between 01 January 2007 and 31 December 2011.

Results Ninety adults were discharged on jejunal feeding within the study period. The number of adults receiving jejunostomy feeding at home had increased with an average of 11 per year from 2007 to 2009 rising to an average of 28 per year from 2010 to 2011. Patient age at start of feeding ranged from 17 years old to 79 years old with a median age of 61.6. The most common reason for home jejunal feeding was post-oesophagectomy for oesophageal cancer (65%), followed by gastrectomy (8%) and oesophageal rupture (6%). Length of time on home jejunal feeding ranged from 7 days to 999 days with an average of 165 days, equivalent to 23.6 weeks. The most common clinical outcome was discontinuation of HETF and a return to normal oral diet (64%), 16% died due to underlying disease, and 14% continued on jejunostomy feeding. A review of the complications associated with use of a jejunostomy feeding tube revealed that 55% had documented complications and of this number, 36% had more than one complication documented. In practice, this incidence may be higher as not all patient records had tube site examination documented. A summary of the most common jejunostomy-related complications is shown in the Abstract PMO-080 table 1 below.

Abstract PMO-080 Table 1

Complication	Incidence (%)
Sutures fell out	18 (21)
Infection at tube site	15 (18)
Leakage at tube site	9 (11)
Dressing not changed as per local guidelines	9 (11)
Tube blockage	7 (8)
Inflamed tube site	7 (8)
Pain at tube site	4 (4)
Overgranulation of stoma	2 (2)

Conclusion This study has shown that the number of patients discharged home on jejunostomy feeding over a 5-year period has increased significantly. Average length of time on jejunostomy feeding was almost 6 months therefore the availability of ongoing and timely follow-up in the community is essential. Of particular note is the high rate of tube-related complications, some of which required admission to hospital or treatment at specialist clinics. This incidence could be reduced by improving training and information on prevention and early detection of complications for community

based health care professionals as well as for patients. These findings have direct implications for practice in highlighting the need for dedicated, specialist and individualised care for patients at home on jejunostomy feeding.

Competing interests None declared.

PMO-081 ENTERAL NUTRITION IN THE CRITICALLY ILL: THE IMPACT OF NURSING ADHERENCE TO FEEDING PROTOCOLS ON THE EFFECTIVENESS OF TREATMENT IN JORDANIAN INTENSIVE CARE UNITS

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Introduction The aim of the study is to assess nurses' adherence to enteral nutrition evidence-based guidelines in intensive care.

Methods Mixed-methods design was employed. This abstract will show the results of the survey which was concerned with the practical issues, the nursing process, and enteral nutrition complications. A cluster sample recruited intensive care nurses (n=253) from different health care sectors in Jordan.

Results Clinical nutrition is perceived by 79.7% of nurses as a secondary role. Nurses showed greater levels of knowledge and responsibility for "preventing complications" and "evaluation" than "assessment" and "identifying goals". Tube position is still confirmed via unreliable measures such as air bubbling technique (mean 4.00, SD 1.14). The mean for measuring Gastric Residual Volume was above the mid-point (3.70, SD 1.33). However, there was inconsistency in recognising the limit, threshold and frequency of measuring this volume. Diarrhoea is the most frequent complication of enteral nutrition (mean 3.36, SD 1.34) followed by abdominal pain, tube dislodgment, weight loss and uncontrolled blood sugar. Nurses perceived that the incidences of complications are less likely to occur in the presence of evidence-based guidelines than absence ($\rho=0.73$, $df=251$, $p<0.001$).

Conclusion Nurses show more concerns about the outcomes of enteral feeding instead of the preliminary assessment. Measuring gastric residual volume and confirming tube placement are still deficient and require further attention. Evidence-based practice is acknowledged by nurses where undertaking such protocols is emphasised.

Competing interests None declared.

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PMO-082 OUTCOMES AFTER "THROUGH THE PEG" PLACEMENT OF JEJUNAL EXTENSIONS

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Introduction Percutaneous endoscopic gastrojejunostomy (PEG-J) placement by conventional techniques is technically demanding,

time consuming and its use is often limited by jejunal tube dysfunction. We aim to describe our outcomes using a “through the PEG” technique of jejunal extension placement.

Methods PEG-J placement in our unit is based upon the technique described by Berger *et al* in 1996. Briefly, a 28Fr PEG tube is inserted and an ultrathin endoscope (4.5 mm) is passed through the PEG tube into the stomach and deep into the small bowel. A guidewire is passed down the endoscope and the endoscope withdrawn leaving the guidewire in place. A 12Fr jejunal extension is passed over the guidewire and inserted fully until seated in the PEG tube. A retrospective review of all PEG-J procedures covering the period 2006–2010 was carried out. Patient demographics, procedure type and indication, sedation requirements and complication rates were recorded. Average tube patency was calculated for each patient (in days) and reason for tube replacement was recorded.

Results Over the study period, 121 procedures were carried out in 17 patients (mean age 59.6 years; 70.6% (n=12) males). Initial placement was successful in 120/121 (99.2%) procedures with a procedure related complication rate of 1/121 (0.8% > bleeding). Indications for PEG-J placement were recurrent aspiration (n=6), stroke (n=2), neurodegenerative disorder (n=2), gastroparesis (n=2), post-operative (n=1), oesophageal tear (n=1), drainage (n=1) and not documented (n=2). 102/121 (84.3%) procedures were for replacement of the jejunal extension tube alone. 73/102 (71.2%) had no indication for tube replacement recorded. The most common causes of jejunal tube dysfunction were kinking (n=12), occlusion (n=8) tube breakage (n=3), tube leakage (n=3) and other (n=3). The mean number of procedures per patient was 7.1 and the mean tube patency was 123.6 days. 90/121 (74.4%) of procedures were performed without conscious sedation. 13/102 (12.7%) jejunal replacements were performed under sedation vs 18/19 (94.7%) gastrostomy plus jejunal extension placements (p<0.001).

Conclusion “Through the PEG” placement of the jejunal extension is a safe and well tolerated procedure in what is often a difficult group of patients. Our technique confers high success rates of initial placement and low complication rates, with acceptable tube patency. Sedation is only occasionally required for those undergoing replacement of the jejunal extension.

Competing interests None declared.

PMO-083 ARE WE MEETING THE NUTRITIONAL NEEDS OF OUR ACUTELY UNWELL SURGICAL INPATIENTS?

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Introduction Patients, admitted to a surgical ward who have undergone a prolonged pre-admission illness are likely to have some element of malnutrition. This may be compounded by surgical procedures (and subsequent fasting) after admission and these patients can go into severe malnutrition quickly, often before the treating team realises it. The presence of malnutrition in a surgical patient has a direct bearing on the overall outcome during hospitalisation. A nutritionally deprived patient is unable to mount an adequate response against infection and the surgical outcome is hence likely to be sub-optimal. Complications such as intestinal anastomosis leakage, wound dehiscence and overwhelming sepsis are more common in patients with malnutrition. The British Society of Gastroenterology has recognised that such patients are common in UK hospitals and on average their length of stay is almost doubled. This had led to the development of comprehensive guidelines regarding enteral feeding in adult hospitalised patients. The aim of the present study was to compare current practice in a district general hospital to the BSG guidelines.

Methods A cross-sectional observational study of inpatients on general surgical wards over a 24-h period was performed. Medical

and nursing notes were reviewed and data recorded regarding nutritional assessment and management.

Results 72 patients were assessed over a 24-h period. Patients were divided into three groups, A elective surgery, B emergency surgery and C acute non-operative admission. Nutritional assessments were carried out on all patients, however BMI was not recorded in any. Pre admission nutritional intake was recorded in 61 (85%) patients. Data from these 61 patients were analysed to determine period of starvation. The median number of days between starvation and commencement of nutritional support was three (range 0–7), 6 (0–11) and 5 (0–12) respectively.

Conclusion This study has shown that many of the patients on a general surgical ward have a significant period of starvation prior to and during their admission. While a nutritional assessment was performed in all patients, BMI and thus assessment of malnourishment as advocated by the BSG guidelines was not recorded in any patient. The nutritional needs of elective surgical patients appears to be well met in our hospital (median time to feeding 3 days) when compared to the BSG guidelines (3–5 days). Emergency admissions, however, were not as well managed with many waiting up to 1 week before nutritional support was instigated. Adequate assessment of nutritional status is important in all surgical patients, this is equally important for both patients undergoing surgery and those who do not require any surgical intervention.

Competing interests None declared.

PMO-084 THE EVOLUTION OF A VIRTUAL PEG ASSESSMENT TEAM: ACTIVITY AND COMPLICATIONS

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Introduction Patients referred for percutaneous Endoscopic Gastrostomy (PEG) insertion often have multiple co-morbidities which do not improve with PEG feeding and lead to significant post-procedure complications. Pre-assessment of patients for PEG insertion improves morbidity and mortality, but is often time-consuming and labour-intensive. An electronic patient record (EPR) could facilitate assessment of patients and multi-disciplinary communication, while a detailed referral form could speed up the information gathering and assessment process. Starting in February 2011 in our Trust, patients referred for PEG were formally pre-assessed at the bedside by a Consultant Gastroenterologist and Nurse Endoscopist. In June 2011 a new electronic referral form was introduced. As a result of the improvements from February to May, a “virtual” assessment team including a Senior Dietician, Speech and Language Therapist, Elderly Care and Palliative Care physician was convened. The referral form was sent by secure email to the team and a virtual discussion took place with formal MDT meeting held when deemed prudent by consensus. Bedside assessment could then be restricted an assessment of fitness for the endoscopic procedure. Data were collected prospectively throughout the year and compared to practice in the preceding 12 months.

Methods Retrospective casenote analysis was conducted using the EPR and Endoscopy databases (Endosoft®) to include all PEG insertions performed. Prospective data collection were possible for all cases undergoing formal and virtual assessment.

Results In 2010, 96 PEG insertions were performed (median 6 per month), compared to 49 within the “formal” and “virtual” team periods (median 2 per month, p<0.005). Patients did not differ significantly by age or gender. 30d mortality was 9/96 (9.4%) in 2010 and 2/49 in 2011 (4.1%; p=0.33). Rates of infection, aspiration pneumonia, buried bumper syndrome and other complications fell significantly (p<0.001). The number of referrals not leading to insertion fell significantly between the formal and virtual assessment periods (p<0.01) with no PEGs inserted in June and July. In