PWE-011 INDICATIONS AND OUTCOMES OF PATIENTS RECEIVING IN-PATIENT PARENTERAL NUTRITION: TYPE 2 IF PATIENTS ON HPN

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Introduction Parenteral nutrition (PN) enables nutritional requirements to be met in cases of intestinal failure (IF) where enteral nutrition is insufficient or not possible.¹The main objective of our audit was to evaluate the indication, outcome, and survival of patients who received PN during their acute hospital admission.

Methods Data on in-patients receiving PN was collected prospectively using the Nutrition Team database. This was then retrospectively analysed, including review of overall outcome and mortality within 12-months of the in-patient spell. All patients receiving PN as an in-patient between January 2014 and December 2017 were included.

Patients were categorised according to type of IF: T1IF (in-patient PN <28 days); T2IF (in-patient PN>28 days; or in-patient PN <28 days who were discharged on HPN with a plan to electively restore intestinal continuity later); and T3IF admissions (established HPN patients admitted acutely). Here we discuss the results of patients with T2IF requiring acute in-patient admission.

Results A total of 117 T2IF admissions were identified, in 98 patients; 44% male; age 1–3 years (mean 55). In 25 admissions the patient received PN for <28 days; however all were discharged as new HPN patients (16 T2IF; 9 T3IF (6 palliative)). Duration of PN in the remaining patients was 2–53 days (mean 52). Cumulative duration of all T2IF admissions was 5219 days. Assuming average cost of an NHS bed day of £222 (NICE 20152); this equates to £1,158,618 (approx. £289,655/yr) in bed days without considering cost of in-patient treatment. 12 patients had multiple admissions with T2IF (–, mean 2); 58% of these occurred in the same year, 42% in separate years.

Indication for PN included: fistulae (21%); obstruction (13%); short bowel (9%); failure of enteral nutrition (8%); post-surgical complications (7%); dysmotility (7%); ischaemic bowel (5%); malabsorption (5%); pancreatitis (4%); cancer (4%); anastomotic leak (3%); perforation (3%); post-op ileus (3%); gastric outlet obstruction (3%); no access for enteral nutrition (3%); crohn's (1%); pre-op nutrition (1%); planned IF surgery (1%).

Outcome of T2IF was discharge on HPN in 55%. Outcome in the remaining patients included: oral nutrition (26%); NJ/Jejunostomy (9%); NG (6%); and RIP on PN (4%). 12-month follow-up data was available in 109 patients; 12-month survival was 77%; overall survival to end August 2018 was 71% (n=83).

Conclusions This audit demonstrates the significant financial cost and bed burden to centres managing patients with T2IF; and highlights the need for an IF tariff. In 45% patients there was return of intestinal function and resolution of intestinal failure, highlighting reversibility of T2IF. It was perhaps surprising that 12-month survival in this cohort was lower than the sub-analysis of all T3IF in-patient admissions (77% versus 62%); this likely reflects that acute in-patient admission in patients with T3IF is a sign of disease progression/decompensation and therefore an indicator for reduced 12-month survival.

REFERENCES

1. Loris Pironi, et al. *Espen guidelines on chronic intestinal failure in adult. Clin Nutr* 2016;**35**:24–07;
- 2.. Costing statement: Implementing the NICE guideline on Transition between inpatient hospital settings and community or care home settings for adults with social care needs (NG27)

PWE-012 INDICATIONS AND OUTCOMES OF PATIENTS RECEIVING IN-PATIENT PARENTERAL NUTRITION: TYPE 3 IF PATIENTS ON HPN

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Introduction Parenteral nutrition (PN) enables nutritional requirements to be met in cases of intestinal failure (IF) where enteral nutrition is insufficient or not possible.¹The main objective of our audit was to evaluate the indication, outcome, and survival of patients who received PN during their acute hospital admission.

Methods Data on in-patients receiving PN was collected prospectively using the Nutrition Team database. This was then retrospectively analysed, including review of overall outcome and mortality within 12-months of the in-patient spell. All patients receiving PN as an in-patient between January 2014 and December 2017 were included.

Patients were categorised according to type of IF: T1IF (in-patient PN <28 days); T2IF (in-patient PN>28 days; or in-patient PN <28 days who were discharged on HPN with a plan to electively restore intestinal continuity later); and T3IF admissions (established HPN patients admitted acutely). Here we discuss the results of patients with T3IF requiring acute in-patient admission.

Results A total of 55 in-patient admissions were identified in 26 existing HPN patients (16 female; 10 male). Age ranged from 2–0 years (mean 60). Cause of IF (indication for HPN) was: short bowel syndrome (40%); dysmotility (38%); palliative cancer (13%); mesenteric ischaemia (7%); and malabsorption (2%).

Duration of in-patient episode was –2 days (mean 16; cumulative total 875). Assuming average cost of an NHS bed day of £222 (NICE 20152); this equates to £194,250 in bed days without considering cost of in-patient treatment. Number of admissions per patient ranged from – (mean 2).

Indication for admission included sepsis (35%); disease flare (22%); elective surgery (13%); elective admission to commence HPN (9%); electrolyte derangement (7%); cancer progression (4%); GI Bleed (4%); chemotherapy complications (2%); fractured pelvis (2%); overdose (2%); and tube change (1%). Source of sepsis included: urinary (n=6), chest (n=5), CRBSI (n=3), discitis (n=2), cholecystitis (n=2), and abdominal collection (n=1). Elective surgery included: venting PEG (n=1); GI surgery e.g. intestinal continuity (n=4); and non-GI surgery (n=2).

Outcome of admission in the majority was discharge on HPN (n=49; 89%); one stopped HPN following continuity surgery. A total of 4 patients died during the admission (7%), and 1 was commenced on the 'care of the dying' pathway (2%). 12-month follow-up data was available in 54 of the admissions (98%); 1 patient had only 9-months following last admission at the time of analysis. 12-month survival was 62%

following admission (16/26); overall survival to end August 2018 was 54% (14/26).

Conclusions This audit highlights the significant cost and complexity of patients with T3IF on HPN requiring in-patient admission to hospital. With an increase in prevalence of T3IF of 20% per annum nationally, it is vital that HPN centres are sufficiently resourced and funded to facilitate management and care of this complex cohort of patients.

REFERENCES

1. Loris Pironi, *et al.* Espen guidelines on chronic intestinal failure in adult. *Clin Nutr* 2016;**35**:24–07;
2. Costing statement: Implementing the NICE guideline on Transition between inpatient hospital settings and community or care home settings for adults with social care needs (NG27)

PWE-013 NUTRITIONAL CARE PATHWAYS OF PATIENTS WITH MALIGNANT BOWEL OBSTRUCTION: EXPERIENCE FROM A UK TERTIARY-REFERRAL CENTRE

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Introduction Emerging evidence is gathering for the use of parenteral nutrition (PN) in patients with malignant bowel obstruction (MBO) who have lost nutritional autonomy and developed Intestinal Failure (IF). There is limited evidence

describing the outcomes for MBO patients who are not referred for PN. We aimed to examine nutritional care pathways of MBO patients by referral for PN and appropriateness of referral/non-referral for PN.

Methods Retrospective cohort study of adults (≥ 18 yrs) admitted to University College London Hospital, admitted with MBO between 1.1.16- 31.12.16 with any readmissions up to 31.12.17. Data were analysed by comparing patients who were referred (R) and not referred (NR) for PN.

Results 72 patients with 117 MBO admissions (mean $\pm$ SD age: 63.1 $\pm$ 13.1 yrs, 79% female), with median no. of admissions/patient: 1 (range: 1–6). 24/72 patients were in R group. Predominant primary malignancies were gynaecological and gastrointestinal (76%). 83% of MBO patients had metastases and 61% were located subdiaphragmatically. All patients were at high risk of malnutrition using UCLH nutrition screening tool (score=8, a score of ≥ 7 indicates high risk of malnutrition) and mean weight loss on admission was 7%. Discussion of PN at MDT (21 vs. 4%, $P=0.02$) and dietetic contact (94 vs 41%, $P<0.0001$) were more likely to occur in the R group. In 13/69 MBO admissions in NR group, the reasons for non-referral to the Nutrition team are unclear. 20/24 referred patients received inpatient PN, and 10 patients went home with PN. The remaining patients did not go home on PN as BO resolved or they were approaching the end of life. There were no differences in weight or BMI by PN referral groups. In all patients, median weight on admission was 55kg (range: 3–90), and 5–5.8kg at 0–3- and 3–6- months follow-up. Overall survival was 4.7 (1–5.2) months, with no differences by referral groups (Fig 1).

Abstract PWE-013 Figure 1 Kaplan Meier Curve of survival by referral for parenteral nutrition.