



Abstract PTH-126 Figure 1

Introduction Prognostic factors in patients on home parenteral nutrition (HPN) are primarily thought to be related to the underlying disease.¹ To the best of our knowledge, there is no data so far pertaining to long-term cardiovascular disease (CVD) risk in these patients. We aimed to review our cohort of HPN patients to assess their 10-year CVD risk using the validated QRisk2 score² and to explore possible associations between HPN and CVD.

Methods We conducted a *retrospective observational study* of patients on HPN using the Leeds HPN database. We included all patients on parenteral nutrition (PN) and parenteral fluids (PF). Further relevant data such as smoking history, blood pressure, etc. were collected at outpatient clinics and their respective general practitioners. Data were entered into an online calculator to obtain QRisk2 scores and analysed using MicrosoftTM Excel. We also reviewed the indication for HPN and assessed their association with CVD risk.

Results A total of 73 patients were included in this study. Their mean age was 53.12 years (range 19 to 83 years) with male:female ratio of 40:60. 78.08% patients were on PN and 21.91% on PF. Indications for HPN are summarised in the pie chart below. QRisk2 score of $\geq 20\%$ (classed as 'high risk' for CVD) was noted in 15.06% patients. Of the patients with high CVD risk, ischaemic bowel was the underlying indication for HPN in 36.36%, Crohn's disease in 18.18%, GI malignancy in 9.09% and miscellaneous indications in 36.36% (including dumping syndrome, enterocutaneous fistula, refractory coeliac disease and diverticular perforation).

Conclusion No study has so far assessed the possibility of a link between HPN and CVD risk. From our pilot retrospective study, 15% patients on HPN were found to have a high 10-year CVD risk. This could potentially have an impact on the overall outcome of this subgroup of chronically ill patients, which needs to be evaluated further. More than a third of patients with high QRisk2 had had ischaemic bowel. Limitations of our study are its retrospective nature and smaller numbers. It is not clear whether the type and volume of HPN could have any impact on their long-term CVD risk. Future research should perhaps focus on further exploring the possible link between CVD and HPN, in the form of a large prospective trial of patients on HPN.

REFERENCES

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- 2 Predicting cardiovascular risk in England and Wales: prospective derivation and validation of QRisk2. *BMJ* 2008;336:1475–82

Disclosure of Interest None Declared.

PTH-127 NUTRITIONAL STATUS AFTER INTESTINAL AND MULTIVISCERAL TRANSPLANT

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Introduction There is limited data on nutritional outcomes post intestinal transplantation in adults. This cohort of patients will inevitably be at high nutritional risk and undergoing major surgery is anticipated to have a further deleterious effect.

Methods Pre and post transplant anthropometric data and nutritional status of all patients undergoing intestinal or multivisceral transplantation from 2007 to 2013 who survived more than 30 days post transplant was collected prospectively. A dynamometer was used to assess grip strength in the non-dominant hand. Bone density was measured by dual x-ray absorptiometry (DEXA).

Results 42 patients have undergone transplant during the time period, full data is reported for 28 patients (Exclusions: 6 transplanted <3 months, 1 graft enterectomy, 4 died within 30 days of surgery, 3 no data). 15 patients received a Multivisceral transplant, 7 Modified Multivisceral and 6 Intestine only. Patients have been followed up for a median of 26 months, to December 2013 or death (n = 5).

The mean BMI of patients at the time of assessment was 21.7 (Standard Deviation (SD) 3.5). Post-transplant, parenteral nutrition (PN) was given for a median of 24 days (range 2–134), enteral nutrition (EN) was given for a median of 57.5 days (range 0–262). The mean maximum weight loss post transplant was 16.6% of pre-transplant weight (SD 7.65%). Over one third of patients lost 20% or more of their pre-transplant weight and only 5 patients have returned to or exceeded their previous weight, though all but one patient has gained weight from their nadir weight. Mean BMI at latest follow-up in survivors is 20.64 (SD 4.6).

The majority of patients (20/23 survivors, 87%) are maintained on an oral diet. 2 patients (8.7%) with an intact graft require PN and 1 patient (4.3%) requires parenteral fluids. One patient (4.3%) continues on EN.

Handgrip strength was measured pre and post transplant (median 17 months post, range 7–34) in 13 patients, 7 demonstrated an improvement, 2 were stable (<5% change) and 4 had worsened. 4/5 patients who were receiving long term PN pre-transplant and had serial DEXA scans showed significant improvements in bone density post transplant.

Conclusion The majority of patients post intestinal and multivisceral transplant have nutritional autonomy; only a small number require parenteral or enteral nutritional support. Improvements in bone density and muscle strength can be demonstrated post transplant. However, significant weight loss does occur in the post-operative period; this should be taken into consideration when patients are being listed and every attempt made to optimise pre transplant.

Disclosure of Interest None Declared.

PTH-128 SMALL BOWEL CANCER: A 20-YEAR SINGLE UK CENTRE EXPERIENCE

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Introduction Small bowel cancer (SBC) is rare and accounts for 5% of all gastrointestinal (GI) malignancies despite the small bowel forming 75% of the GI tract.^[1] Typical non-specific symptoms lead to late diagnosis and poor prognosis. We aim to establish a better understanding of the natural history and genetic features of SBC.

Methods A regional UK cancer registry identified local SBC patients diagnosed from January 1991 to January 2011. We

Abstract PTH-128 Table 1 Anatomical and histological distribution of SBC

| | Duodenum | Jejunum | Ileum | Unknown | Total |
|------------------|------------|-----------|-----------|-----------|------------|
| Adenocarcinoma | 21 | 9 | 4 | 3 | 37 |
| Neuroendocrine | 3 | 1 | 6 | 1 | 11 |
| Sarcoma | 1 | 0 | 0 | 1 | 2 |
| Unknown | 75 | 12 | 20 | 48 | 155 |
| Total (n) | 100 | 22 | 30 | 53 | 205 |

retrospectively reviewed medical records collecting data on patient demographics, environmental and medical risk factors, family history, natural disease progression and immunohistochemical analysis (IHC).

Results The registry identified 205 SBC patients, 58% male and 42% female, who were diagnosed at a mean age of 63 years. Patients presented with abdominal pain (23.3%, n = 60), altered bowel habit (16.7%), weight loss (15.0%), bowel obstruction (15.0%) jaundice (13.3%), anaemia (10.0%) and other (6.6%). Investigations included CT (85.7%, n = 35), MR (8.6%) and barium (11.4%) imaging; gastroscopy (37.1%) that detected 8 of 9 duodenal SBCs and were reported normal in 2 jejunal and 2 ileal SBCs, DBE (2.9%) and ERCP (2.9%) that detected 1 duodenal SBC each; emergency (8.6%) and staging laparotomy (8.6%). SBC anatomical and histological distributions are described in Table 1. Patients were diagnosed at disease stage I (11.4%, n = 35), II (22.9%), III (20.0%) and IV (45.7%). Treatment included curative surgery (66%, n = 38; 12 resections, 7 bypasses and 6 Whipple procedures and adjuvant chemotherapy (AC) in 20%) with a 60% success rate and recurrence in 16.7% within a year; palliative surgery (18.4%; 6 bypasses and AC in 66.7%) and medical palliation (15.6%). Mortality rates at 1, 2, 5 and 10 years were 74.3%, 79.8%, 91.7% and 98.2% respectively (n = 109). Environmental factors included smoking (47%, n = 53) and drinking alcohol (51.1%, n = 45). Co-morbidities included peptic ulcer disease (8.4%, n = 72), coeliac disease (4.2%), Crohn's disease (1.4%) and ulcerative colitis (1.4%). Furthermore, 23.6% of patients (n = 89) had ≥1 other malignancies that were metachronous (83.3%), synchronous (12.5%) or both (4.2%). Family history included a 1st or 2nd degree relative with malignancy (28.2%, n = 39) or familial adenomatous polyposis (7.7%). IHC showed Lynch syndrome and adenomatous polyposis coli gene mutations in 42.1% (n = 19) and 40% (n = 10) respectively.

Conclusion Our understanding of SBC is limited by its insidious course, difficult assessment and rarity coupled with multiple histological subtypes. A more comprehensive understanding of SBC and its genetic predisposition may allow high-risk patient stratification to earlier identify and treat SBC thus improving its poor prognosis.

REFERENCE

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Disclosure of Interest None Declared.

PTH-129 A RETROSPECTIVE AUDIT OF PEG INDICATIONS AND COMPLICATIONS AT A DISTRICT GENERAL HOSPITAL FOLLOWING THE INTRODUCTION OF A MULTI-DISCIPLINARY NUTRITION TEAM

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Introduction Percutaneous endoscopic gastrostomy (PEG) is the preferred method for inserting feeding gastrostomy tubes. The national confidential enquiry into PEG outcomes showed that patient selection was paramount for improving associated mortality and morbidity rates [1]. We carried out a retrospective audit into the indications and complications associated with PEG insertion at West Suffolk Hospital, a district general hospital, during 2008–2009 and 2013. During this period a multidisciplinary nutrition team approach and PEG referral proforma were introduced.

Methods Retrospective audit data were collected during two periods, January 2008 to December 2009 and January to September 2013. The indication for PEG, documentation of antibiotic prophylaxis, the presence of a MDT review and complications post PEG insertion were audited.

Results 55 PEG placements occurred during the first audit cycle. 56% were inserted for dysphagia caused by cerebrovascular accident. Antibiotic prophylaxis were documented in 80% of cases. Seven patients did not have an MDT discussion during the admission. There were no immediate complications. Three patients died within 30 days of PEG insertion (two died of pneumonia and one from large bowel obstruction). There were 36 PEG insertions during the second audit cycle. 39% were inserted for dysphagia caused by CVA. Antibiotic prophylaxis were documented in 83% of cases. All patients had an MDT discussion. Two immediate complications were reported. There were no reported deaths 30 days post procedure.

Conclusion Following the introduction of a systematic MDT approach to PEG, there has been a reduction in 30 day mortality post-PEG insertion. When carefully monitored the use of PEG for long term enteral feeding can be used safely and successfully in a district general hospital.

REFERENCE

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Disclosure of Interest None Declared.

PTH-130 A COMPARISON OF THE NUTRITION SCREENING TOOL AND MALNUTRITION UNIVERSAL SCREENING TOOL ON REFERRAL RATES FOR DIETETIC ASSESSMENTS

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Introduction We aimed to compare the “Nutrition Screening Tool” (NST) and the “Malnutrition Universal Screening Tool” (MUST) on referral rates for dietetic assessments in in-patients in a Tertiary Neurology and Neurosurgery unit. Each tool generates a score above which dietetic assessment is recommended (a NST a score of 12 or more out of 22, a MUST score of 2 or more out of 5). The MUST score is considered the gold standard assessment method. The NST has been introduced in some centres with anecdotal reports of a reduction in referrals for dietetic assessment.

Methods In-patients at the National Hospital for Neurology and Neurosurgery were assessed for a one month period. The NST and MUST was completed on all available in-patients. A comparison of the number of referrals to dieticians was made using each assessment tool.