requiring home parenteral nutrition (HPN). Few outcome data are reported on these patients [1,2,3].

Methods Records were reviewed of all patients with SSc, who had been referred to a national IF centre and who required HPN between 1985 and 2012. Disease characteristics were evaluated and survival/outcome data compared to all patients requiring HPN in the IF centre.

Results 25 patients (5 male, median age: 55 (range 24–76)) with SSc received HPN. Median time from SSc diagnosis to HPN was 58 months (range 0–378). 24/25 patients had small intestinal involvement. 1 patient had severe colonic and pharyngeal dysmotility but could not tolerate enteral feeding. 17 patients had bacterial overgrowth. 7 reported pseudo-obstruction episodes and 5 had intestinal resections.

Prior to HPN, 7 patients had failed naso-enteric feeding. 10 had a gastrostomy or jejunostomy inserted; 7 of these patients received enteral feeding for < 1 yr. The remaining patients were commenced directly on HPN without enteral tube feeding because of the severity of dysmotility/associated co-morbidity. Only 2 patients were weaned off HPN (after 8 and 29 months) following successful medical optimisation. Survival on HPN is shown in table 1. No patients died from HPN-related complications. 17/18 died from underlying SSc disease. 1/18 died from malignancy. 7 patients survive, 6 remain on HPN (median duration: 50 months, range 27–173).

8 patients were trained to manage their central venous catheters and self-administer HPN. 17 patients relied on others to administer their HPN. Reported catheter complications in SSc patients (37,600 catheter days) included occlusion (26), sepsis (7), fracture (3) and site calcification (2). Catheter sepsis rate equated to 0.19 episodes per 1000 days (vs. 0.39 per 1000 days for all HPN patients at this centre). No patient with SSc developed IF-associated liver disease.

Abstract OC-061 Table 1 Survival on HPN

	1 year	5 years	10 years	20 years
SSc HPN patients	75%	30%	11%	6%
All HPN patients	89%	67%	58%	27%

Conclusion This is the largest reported series of patients with SSc requiring HPN. Our data show that HPN offers a safe means of nutritional support for patients with severe SSc-related GI involvement, but that SSc-related mortality remains high. Notably, the SSc group had a lower catheter-related sepsis rate than all patients requiring HPN. Additionally, the majority relied on others for catheter care.

Disclosure of Interest None Declared

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OC-062 LOW INCIDENCE OF ASPIRATION EVENTS DURING HOME NASOGASTRIC FEEDING: A SAFE STRATEGY FOR LONG TERM FEEDING?

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Introduction Nasogastric (NG) pump feeding is associated with risks of aspiration and subsequent pneumonia with previous studies in adult inpatients suggesting 2.4 aspiration episodes per 1000 tube-feeding days. However, there is little published data on outcomes of patients receiving home NG feeding. We analysed our long term home NG feeding cohort for evidence of aspiration related hospital admission.

Methods This was a retrospective service evaluation of the home enteral tube feeding cohort at Portsmouth Hospitals NHS Trust. Data was obtained from hospital electronic databases, patient clinical notes and PAS patient management software. Data was analysed in SPSS 20.

Results A total of 117 patients who had received home NG feeding over previous 5 years were evaluated. 30 patients (26%) were excluded due to incomplete datasets. 87 patients were recruited (Male [48%], Female [52%], age [mean 55.6; 95% confidence interval 51.8–59.2]) with a total of 12957 tube-feeding days (mean 150; 95% confidence interval 110–191 days). Indications include upper aerodigestive tract cancer, 32; malnutrition, 25; neurodegenerative disorders, 6; connective tissue disorders, 2; stroke, 1; lymphoma, 1; metabolic stabilisation of short bowel and or high output stoma, 16. Eight hospital admissions in separate patients were recorded; however, only 1 episode of pneumonia was recorded (0.08 aspiration episodes per 1000 tube-feeding days). There were no hospital admissions relating to misplaced/displaced NG tubes.

Conclusion Home NG pump feeding represents a safe long-term alternative to gastrostomy feeding when supported by a robust specialist enteral tube feeding support service (ETFSS), in those deemed unsuitable for gastrostomy placement. A 30-fold lower incidence of aspiration episodes compared with published inpatient literature (0.08 vs. 2.4 episodes/1000 tube feeding days) reflects expertise of clinical nutrition nurse specialists within the ETFSS, with appropriate patient selection and outreach management. A daytime walk in service prevents unplanned hospital admissions through tube displacement.

Disclosure of Interest None Declared

OC-063 PAIN AND ANXIETY EXPERIENCED BY PATIENTS FOLLOWING PEG PLACEMENT

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Introduction Abdominal pain following percutaneous endoscopic gastrostomy (PEG) placement is a recognised complication considered to be secondary to a chemical peritonitis. However, the prevalence and degree of severity of pain is poorly characterised. Abdominal pain following liver biopsy is strongly linked to preprocedural anxiety levels[1]. We assessed abdominal pain and anxiety associated with PEG placement.

Methods A prospective questionnaire assessed patient anxiety and abdominal pain 1 hour (h) pre PEG placement, 1h post and 24h post using a 10-point Likert scale. The questionnaire was completed by the patient where possible or clinician if not. Abdominal pain was assessed by examination at 1h post procedure. 24h post procedure complications and analgesia requirements were recorded. Patient's Mini Mental Score (MMSE, 0–30) and Barthel index (0–20) were completed.

Results 70 consecutive patients (M:F 45:25) median age 61.5 (19–94) were assessed. The commonest indications were head and neck malignancies (44%) and stroke (11%). PEG placement was on first attempt in 68 cases, with no clinical complications.

Mean (StD), MMSE, Barthel, anxiety and pain scores.

24 self-reporting patients had a pain score of 1–3 at 1h post placement and 20 at 24 h. 3 patients reported a pain score of 7–10 at 1 h post placement and 7 at 24 h. 21/49 self-reporting patients and 0/21 non self-reporting had PEG site and/or general abdominal tenderness on clinical examination at 1h.

Pain post PEG placement was noted in only 1 clinician-assessed patient. This was at 24 h. 50.7% of patients took analgesia at 24 hours post procedure (all self-reporting). Regression showed no relationship between pre placement anxiety and post placement pain.

Abstract OC-063 Table 1

	MMSE	Barthel	Anxiety			Pain		
Assessment			Pre	1h post	24h post	Pre	1h post	24h post
Patient n = 49	28.1 (6.4)	17.8 (5.0)	3.5 (3.2)	1.7 (2.3)	2.8 (2.9)	0.1 (0.3)	2.0 (2.3)	3.4 (2.9)
Clinician n = 21	6.2 (9.6)	3.2 (4.3)	0.3 (0.7)	0.1 (0.2)	0.2 (0.7)	0 (0)	0 (0)	0.1 (0.7)
Combined n = 70	21.6 (12.6)	13.4 (8.3)	2.5 (3.0)	1.2 (2.0)	2 (2.8)	0 (0.3)	1.4 (2.1)	2.5 (2.9)

Conclusion Pain at 1h post PEG placement was common in self-reporting patients and usually mild. By 24h, 41% reported moderate to severe pain often taking analgesia. Preprocedural anxiety did not predict post procedural pain. Clinician examination of all patients at 1h did correlate with self-reported discomfort or predict self reported pain at 24h. Clinician assessment at 1h and 24h where patients could not self assess failed to identify pain. After PEG placement patients should be offered advice on pain and given access to analgesia. It is likely that pain is not identified in debilitated patients and clinicians need to be more alert to its possible presence.

Disclosure of Interest None Declared

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Radiology free papers

OC-064 PET SCANNING IN GASTRIC CANCER: A COMPARISON OF AVID VERSUS NON AVID CANCERS

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Introduction Only some gastric cancers (GC) are detectable on PET imaging (PET avid). Few studies have assessed the molecular and biological differences between PET avid and non-avid GCs. Thus there may be prognostic differences between the two groups that have not been established.

The primary aim was to identify and measure clinical differences of PET avid and non-avid primary GCs. The secondary aim was to determine whether characteristic molecular differences exist between PET avid and non-avid primary GCs.

Methods Participants selected for this study were individuals (male and female, any age) with a diagnosis of GC that attended the Peter MacCallum Cancer Centre, Victoria, Australia, during the period of 1992–2002 who had agreed to partake in research.

A total of 52 primary GC cases who received an initial PET scan were identified and included in this study.

Results From the 52 cases identified 29 tumours were PET avid and 23 were non-avid.

PET avid tumours were mostly intestinal type, 86%; T stage 3, 46%, with no cases of T4. Avid tended to be N1, 47%. Suggesting they may spread via lymph rather than locally. An AJCC stage of Ib was the most frequent, 35%, but overall more were stage IIIa+b, 49%. Avid tumours were located along the greater and lesser curve of the body in equal proportion: 25% each.

Non-avid tumours were mostly diffuse type, 68%; T stage 3, 41%, with 9% of T4. Non-avid tumours tend to be N0, 46%. Overall, AJCC stage IIIa was the most frequent, 33%, with 9% at stage IV. Non-avid tumours were found more in the antrum, 40%. Signet ring carcinomas were found to be significantly more likely to be PET non-avid, p = 0.017. Non-avid tumours were significantly, p = 0.004, less differentiated than avid.

Progression free survival was significantly less in the avid group, survival of 808 versus 1208 days, p = 0.04. However, the overall survival showed little difference. From these results it is difficult to determine true survival difference. Larger studies are needed to investigate this further.

The overall genetic profiles of the avid compared to non-avid were not significantly different.

Conclusion Our results suggest that PET avid tumours are diagnosed earlier or that they are less locally invasive, and that non-avid tumours are locally invasive.

PET does appear to provide valuable information regaurding the histological sub-type of the tumour, its likely differentiation, lymph node involvement and metastasis (stage). Information available from PET on the genomics of the tumour is still unclear but there does seem to be some difference in expression levels of genes in avid and non-avid tumours. Further studies with larger numbers are needed. The use of PET for diagnosis, preoperative staging and management planning is still uncertain.

Disclosure of Interest None Declared

OC-065 AUDIT OF RADIATION EXPOSURE IN CROHN'S PAST AND PRESENT

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Introduction The aim of this audit was to establish how much radiation patients with newly diagnosed Crohn's disease are exposed to and if this has changed over time within our practise. We hoped that with the increased availability of new imaging modalities such as ultrasound and MRI scanning the exposure of these patients to radiation may have fallen.

Methods Using the IBD database all Crohn's patients diagnosed from 1995 to 2011 were identified. We then collected data on 59 patients diagnosed from 1995 to 2001 and on 61 patients diagnosed from 2006 to 2011. These dates were chosen as ultrasound of the small bowel was introduced in UHL in 2002, and took a few years to become established as an imaging technique in Crohn's.

Data for each patient was collected only on studies performed in the first year of diagnosis, to prevent bias occurring due to the length of time that patients had the disease. We also felt the first year was likely to encompass studies performed to establish the diagnosis and extent of disease.

Results For patients diagnosed between 1995 and 2001 with Crohn's disease the average exposure to radiation in the first year was 1.83 mSv (range 0–12.3 mSv). For patients diagnosed between 2006 and 2011 we found an average exposure of 2.67 mSv (range 0–24 mSv), an increase of 46%.

Abstract OC-065 Table 1

Dates	No of patients	MRI	US	CT	AXR	Ba studies	Average dose (mSv)
1995–2001	59	0	24	4	24	35	1.83
2006–2011	61	25	65	19	45	5	2.67