

**PTH-122 HOME PARENTERAL NUTRITION IN PALLIATIVE CARE: A RETROSPECTIVE STUDY TO IDENTIFY POTENTIAL PROGNOSTIC INDICATORS**

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**Introduction** The use of home parenteral nutrition (HPN) in the palliative setting is less common in the UK than in Europe and the USA. It remains controversial with little evidence base supporting the existing guidance. Patient selection remains challenging. We aimed to identify potential prognostic indicators in palliative care patients receiving HPN using a retrospective analysis.

**Methods** Palliative care patients commenced on HPN were identified. Medical notes, computer records and the HPN database were accessed to identify patient demographics, primary diagnosis and aetiology of intestinal failure, blood test results potentially associated with prognosis (eGFR, albumin (not employed as a marker of malnutrition), CRP, Hb), presence of ascites prior to starting HPN, and total number of nights on HPN. By dichotomising the blood results into CKD stage 3 or worse (eGFR <60), albumin ≤30, CRP >50, Hb <10, we were able to derive Kaplan-Meier survival plots to identify statistical significance associated with survival.

**Results** From the HPN database of 111 patients, 20 (18%) were identified as palliative. Six were male (30%), and the median age (interquartile range (IQR)) was 56.4 (51.5–66.8) years; range 25.2–81.6. Between 2000 and 2006 four patients commenced palliative HPN, while 2007–2013 there were 16. At the time of data collection 80% (16/20) had died. The median number (IQR) of nights spent on HPN was 85 (19–352). The most common indication for HPN (aetiology of intestinal failure) was gastro-intestinal obstruction (n = 13, 65%) and short bowel syndrome following palliative surgical resection (n = 4, 20%).

The median (IQR) eGFR was 90 (53.5–90), with eGFR <60 n = 4, median (IQR) albumin 30 (24.5–35); low albumin ≤30, n = 10; median Hb 10.4 (9.3–10.9); Hb <10 n = 7; median (IQR) CRP 10.5 (3.8–89.3), high CRP >50 n = 4. Of the 14 available case notes reviewed, there was evidence of ascites prior to starting HPN in 35.7% (5/14).

Kaplan-Meier survival plots identified a statistically significant shorter prognosis on HPN if the presenting albumin was ≤30 p = 0.016, median 66 (5–115) days, and similarly if the CRP >50 p = 0.04, median (IQR) 98 (56–122). No significance was found with low Hb, CKD stage 3 or worse or presence of ascites when compared with prognosis by Kaplan-Meier survival plots.

**Conclusion** We conclude that a low albumin (not a marker of malnutrition) and high CRP may help to predict those who are likely to survive less long on palliative HPN. When examining median days this appears most pertinent with a low albumin. There does not appear to be any significant association between 'presence of ascites', a low Hb or a low eGFR and survival time on HPN. While this study does not examine quality of life, the

use of albumin and CRP may help direct whether HPN may be of benefit in the palliative setting.

**Disclosure of Interest** None Declared.

**PTH-123 QUALITY OF LIFE AND PERFORMANCE STATUS SCORES FOLLOWING INTESTINAL TRANSPLANTATION ARE SIMILAR TO THOSE OF PATIENTS ON HOME PARENTERAL NUTRITION IN THE UK**

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**Introduction** Survival following Intestinal transplantation (ITX) has improved, approaching that of home parenteral nutrition (HPN) at 5 years. We describe quality of life (QOL) and performance status (PS) on uncomplicated HPN, those with criteria for ITX due to complicated HPN (CHPN) and those after ITX.

**Methods** SF36 was used to assess QOL. Performance status was assessed by health related visual analogue scale (VAS), ECOG and Karnofsky performance score (KS).

**Results** [Table – grouped data]. There was a trend for QOL and PS to be lower on CHPN than HPN and ITX (not significant, NS)

Paired data for SF36 pretransplant (CHPN) and post-transplant revealed "general health" was the only function to significantly improve (p < 0.05). Individual patients' total scores improved in 4/11 with a statistically significant improvement in a further in 3/11 (p < 0.05) and were worse in 3/11. PS showed a trend for improvement post ITX compared to CHPN and HPN [All Wilcoxon signed rank, NS].

**Conclusion** SF36 improves significantly in approximately 25%, but falls in 25% after ITX compared CHPN and trends suggest performance improvement after ITX. With more data effects of ITX on QOL and PS will emerge and if improvements are confirmed earlier transplantation for those dependent on HPN may be justifiable.

**Disclosure of Interest** None Declared.

**PTH-124 CHANGES IN THE INDICATIONS FOR REFERRAL OF ADULTS FOR INTESTINAL AND MULTIVISCERAL TRANSPLANTATION**

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**Abstract PTH-123 Table 1**

	n	VAS	KS	ECOG	SF36Physical score	SF36Mental health score
HPN	21	43 (33,100)	60 (52,77)	1.5 (1,3)	30 (22,39)	47.3 (29.9,56.6)
CHPN	23	37.5 (23,55)	70 (52.5,80)	2 (1,2.7)	28.4 (21.2,34.6)	37.5 (32,42)
ITX	13live	50 (0,70)	70 (60,85)	1 (1,2)	30 (22,39)	43 (35,54)
ITx	18all	45 (20,70)	60 (37.5,72.5)	1 (1.5,3.5)	30.2 (22.9,38.1)	43.2 (35.15,51.75)

[Median (25<sup>th</sup>/75<sup>th</sup>%ile); VAS and KS: Best score100;ECOG: Best score 0]

Abstract PTH-124 Table 1

	Short bowel (%)	Motility disorder (%)	Re-transplant (%)	Desmoids (%)	Other (%)	Total
2006	1 (100)					1
2007		1 (50)			1 (50)	2
2008	1 (30)			2 (70)		3
2009	3 (60)		1 (20)		1 (20)	5
2010	5 (83)		1 (17)			6
2011	6 (75)				2 (25)	8
2012	2 (33)		1 (17)	1 (17)	2 (33)	6
2013	8 (50)	3 (19)	1 (6)	1 (6)	3 (19)	16

**Introduction** Small bowel transplantation (SBT) was first performed in the UK in Cambridge in 1991. Recipients now undergo small bowel (SBT), liver and small bowel (LSBT), modified multivisceral (MMVT – small bowel, stomach, pancreas, no liver) and multivisceral (MVT – intestine, stomach, pancreas and liver) transplantation. Cambridge is the only UK centre offering MVT in adults.

The main indications for referral to a transplant centre are:

1. Irreversible intestinal failure plus life threatening complications of parenteral nutrition (PN).

2. Extensive surgery requiring partial or complete evisceration.

**Methods** Prospective data was collected from all patients who underwent intestinal and multivisceral transplantation at Addenbrooke's Hospital between 2003 and 2013. All patients are discussed and indications for transplantation agreed prior to listing at NASIT (National Adult Small Intestinal Transplant forum).

**Results** 47 transplants were performed on 43 patients; 4 procedures (9%) were re-transplantation for a primary non-functioning graft (2/4) or acute rejection (2/4). The indications for transplant are presented below:

Sixteen transplants were performed in 2013 - MVT (57%), SBT (31%), LSB (6%) and MMVT (6%). 50% of these were due to short bowel - arterial ischaemia (50%), Crohn's (26%), venous ischaemia (12%) and other short bowel (12%). Colon is now routinely included in the graft to aid fluid balance and does not preclude endoscopic surveillance for rejection.

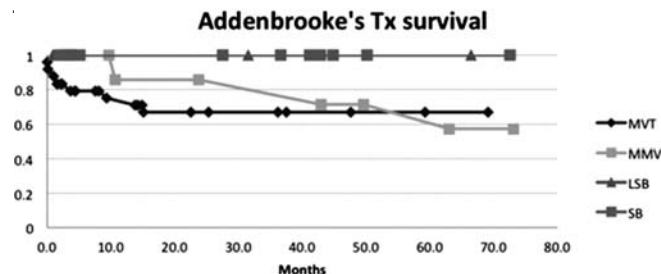
**Conclusion** The number of small bowel and multivisceral transplants performed over the last 10 years has increased, and more than doubled in 2013. Short bowel remains the commonest indication for transplantation. Historically this was mainly due to Crohn's disease however in 2013, it was mainly due to ischaemia; this trend was reflected worldwide. In our cohort, an increase in acute arterial thromboses causing coeliac/mesenteric ischaemia resulted in 3 recipients being listed urgently for MVT. There has also been an increase in the number of patients referred with portal vein thromboses extending into the superior mesenteric vein, precluding liver transplant alone.

**Disclosure of Interest** None Declared.

#### PTH-125 SURVIVAL FOLLOWING INTESTINAL AND MULTIVISCERAL TRANSPLANTATION AT ADDENBROOKE'S HOSPITAL, CAMBRIDGE, UK

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Abstract PTH-125 Figure 1

**Introduction** Small intestinal transplantation (SBT) was first undertaken in the UK in Cambridge in 1991. Since the introduction of new immunosuppressive agents around the millennium, results have improved and we present our experience over the last 10 years. Since 2003, 47 transplants have been performed on 43 patients. Grafts include small bowel or small bowel/colon (SBT), liver and small bowel (LSBT), modified multivisceral (MMVT – small bowel, stomach, pancreas, no liver) and multivisceral (MVT – intestine, stomach, pancreas and liver) transplantation. Cambridge is the only UK centre offering MVT in adults.

**Methods** A review of all patients who underwent small intestine and multivisceral transplantation at Addenbrooke's Hospital between 2003 and 2013. Kaplan-Meier survival data are shown for each group of organs transplanted.

**Results** Five year survival for all patients transplanted is 77%. Survival curves for each organ group transplanted is graphed below:

**Conclusion** Five year survival in our patients transplanted since 2003 is 100% for SBT and LSBT and 65% for MVT, compared with international registry survival figures of 59% (SBT and LSBT combined) and 22% respectively.

In recent years we have also experienced an increase in the number of urgent transplants performed and these patients are often critically unwell at the time of surgery. Our centre undertakes a relatively large number of procedures and this, coupled with a particular focus on multidisciplinary team working, may account in part for our favourable survival figures.

**Disclosure of Interest** None Declared.

#### PTH-126 ASSESSMENT OF CARDIOVASCULAR RISK OF PATIENTS ON HOME PARENTERAL NUTRITION

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