

Malnutrition Matters, Joint BAPEN and Nutrition Society Meeting, 2nd and 3rd November 2010, Harrogate

The use of home parenteral nutrition as a treatment option in encapsulating peritoneal sclerosis

N. El-Sherbini, M. Clemenger, E. A. Brown and N. Duncan

The West London Renal and Transplant Centre, Imperial College Healthcare NHS Trust, London W12, UK

Encapsulating peritoneal sclerosis (EPS) is characterised by bowel obstruction and has a high mortality rate of between 43 and 69%⁽¹⁾. Home parenteral nutrition (HPN) may be required in severe cases.

EPS patients starting parenteral nutrition (PN) between September 2007 and August 2008 were identified. Data were collected on weight, BMI, handgrip strength (HGS), 7-point subjective global assessment (SGA), mid-arm circumference (MAC), plasma albumin, method of nutrition support and gastrointestinal symptoms at discharge, 2, 4, 6, 8, 10, 12 and 18 months.

Data are presented for 5 surviving patients (3 transplant, 2 haemodialysis), 1 patient died prior to discharge. Mean time from EPS diagnosis to start of PN was 4.8 months and mean length of time on PN was 19.3 months.

Two patients no longer require PN (PN duration = 9.3 and 10.8 months) and 3 remain on PN (PN duration = 27.1, 23.7 and 25.3 months). The changes in nutritional parameters from discharge on HPN to 18 months are shown in the table below.

	Weight (kg)		BMI (kg/m ²)		HGS (kg)		MAC (cm)		SGA (1-7)		Albumin (g/dl)	
	0 months	18 months	0 months	18 months	0 months	18 months	0 months	18 months	0 months	18 months	0 months	18 months
1	45.9	49.4	17.5	18.8	11.9	15.8	23.5	25.0	4	5	23	30
2*	46.6	47.8	19.6	20.2	12.6	12.6	24.0	25.5	5	7	31	38
3*	64.0	64.5	23.2	23.4	19.8	28.1	28.0	28.0	5	7	22	30
4	50.0	59.5	21.1	25.1	9.8	17.7	26.0	30.0	6	7	20	27
5	51.7	57.7	18.5	20.7	17.3	31.6	21.0	22.5	3	6	28	27

*No longer on PN.

All nutritional parameters improved or were maintained in both patients no longer on PN. Both can manage an oral diet and one requires oral nutritional supplements. In the three patients remaining on PN, all nutritional parameters improved or were maintained in all patients except for one where albumin decreased slightly. Only one patient can manage an oral diet and oral nutritional supplements.

Although GI symptoms have improved or been maintained in the two patients no longer requiring PN, no improvements were seen in those remaining on PN. The mean number of days in hospital over the 18 months was 112 d with those no longer on PN having fewer hospital days (15 and 29 d) compared to those remaining on PN (84, 190, 241 d). However, in the three patients remaining on PN, the number of hospital days reduced by 74, 81 and 97% from the first 6 months after discharge to the last 6 months.

Patients with severe EPS can be maintained on PN. However, the presence of GI symptoms, the inability to maintain an oral diet and number of hospital days admitted may provide a significant burden to these patients and affect their quality of life. In these patients, alternative treatment options might have to be considered.

1. Kawanishi H, Kawaguchi Y, Fukui H *et al.* (2004) *Am J Kidney Dis* **44**, 729-737.