A Review of the Home Parenteral Nutrition Service in Tallaght University Hospital

Tallaght University Hospital | Ospidéal Ollscoile Thamhlachta

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Introduction

Home Parenteral Support (HPS), either in the form of Home Parenteral Nutrition (HPN) or home intravenous (IV) fluids +/- electrolytes, is a life-saving therapy for patients with chronic intestinal failure[1].

Data regarding the prevalence of Intestinal Failure (IF) and number of patients requiring HPS in Ireland is limited.

National guidelines recommend obtaining reliable data on the incidence of HPN and other relevant patient data to allow a detailed analysis of practice and monitoring of trends[2].

Aim

To conduct a retrospective analysis of all patients requiring HPS in Tallaght University Hospital (TUH) over the past 17 years, from 2008 to 2025, in order to explore the demands of the service and plan future service delivery.

Methods

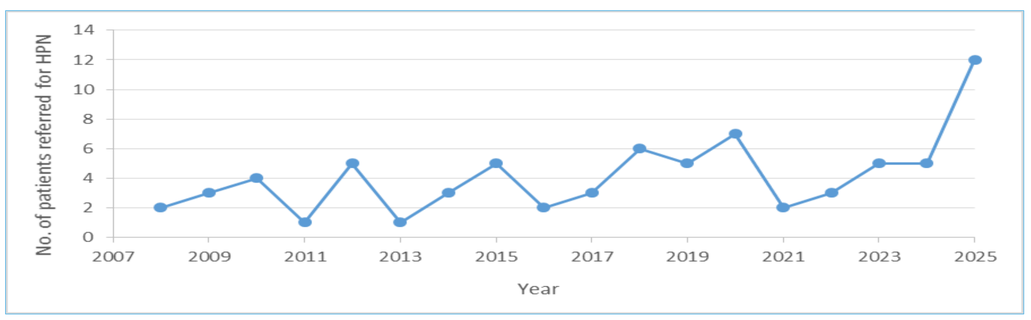
All adult patients referred for HPS between 2008 and 2025 were included.

Patients' demographics, referring specialty, underlying diagnoses, mechanism of intestinal failure, duration on HPS and outcomes were recorded.

Results

74 patients were referred for HPS during the review period. 55% of HPS referrals came from surgical teams, followed by 31% from oncology and haematology and 14% from gastroenterology.

Figure 1. Annual HPS Referrals 2008-2025



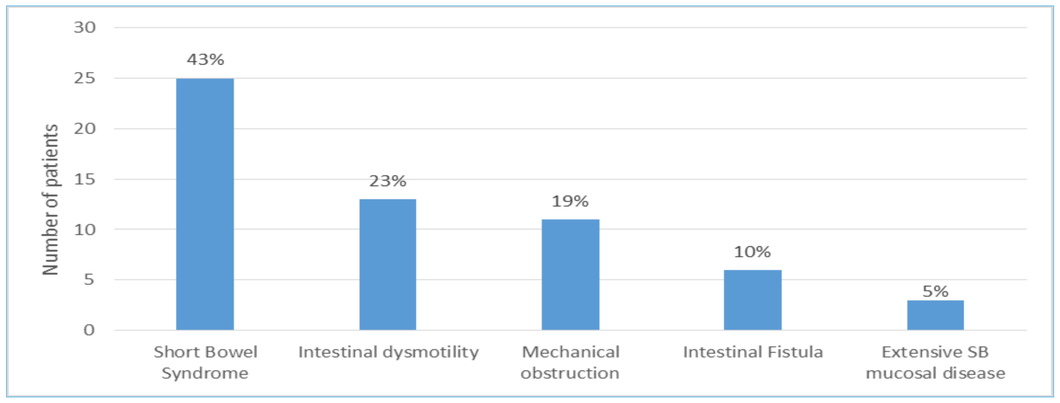
78% (n=58) of patients referred for HPS workup were successfully discharged; 53 on HPN & 5 on home IV fluids +/- electrolyte infusions.

39 (67%) were female and 19 were male. The average age at commencement of HPS was 55 years (range 29 -78 years). Over one third of our patient population were >60 years of age at commencement of HPS.

69% (n=40) of patients had IF due to benign aetiologies with surgical complications (n=15), motility disorders (n=9) and mesenteric ischaemia (n=8) being the top three diagnoses. 31% (n=18) of the cohort had an active malignancy.

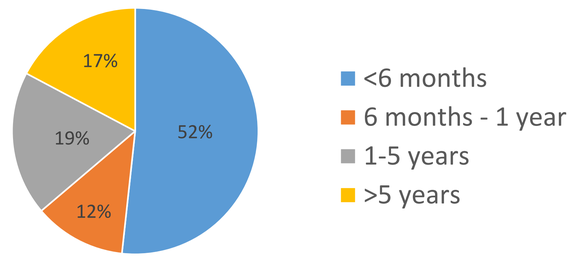
Overall, Short Bowel Syndrome (SBS) was the most prevalent pathophysiologic mechanism of IF in 43% of our cohort.

Figure 2: Pathophysiologic Mechanism of Intestinal Failure, ESPEN classification[3]



The mean duration on HPS was 23 months. 10 patients (17%) required HPS for greater than 5 years with one patient on HPN for over 17 years. 52% (n=30) required short term HPS i.e. less than 6 months.

Figure 3. Duration on Home Parenteral Support



At the time of data analysis, 28% (n= 16) of patients remained on home parenteral support. 31% (n= 18) had transitioned to oral or enteral nutrition; half of these (n=9) underwent surgery to restore continuity of the gastrointestinal tract in order to discontinue HPS.

34% (n= 20) died on HPS; 12 of these patients had a background of advanced malignancy. Mortality among advanced cancer patients on HPS was 67% at 3 months, 83% at 6 months and median survival was 65 days.

Conclusion

This study details the characteristics and outcomes of patients on HPS in Tallaght University Hospital over a seventeen year period. It also contributes to the national picture on incidence and practice in relation to chronic intestinal failure in Ireland.

Observations from our study are in line with international trends showing advancing age in the HPS population, a higher proportion of patients with an oncological diagnosis and increasing use of short term HPS.

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References:

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