

Top Tips for the Oral/enteral Nutrition and Home Parenteral Support for Patients with Small Bowel Obstruction due to Advanced Malignancy during the COVID-19 Pandemic

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Advanced malignancy is considered when cure is no longer possible, or where treatment has been declined by the patient or is not viable due to comorbidities. Intestinal failure (IF) in patients with malignancy is most often caused by bowel obstruction, which may be partial, intermittent or complete. IF can also be due to an enterocutaneous fistula, short bowel (resulting from surgery), dysmotility or severe mucosal disease (often following chemotherapy or radiotherapy). If the obstruction is partial or intermittent an oral/enteral regimen may be possible but rarely is the case if complete obstruction.

Home parenteral support (HPS) includes home parenteral nutrition (HPN) and/or fluids and is the treatment for patients with Type 3 intestinal failure (IF) requiring long-term nutrition/fluid. When to consider HPS in patients with advanced abdominal malignancy is already covered in a BIFA position paper. However, the COVID-19 pandemic has had a significant impact on HPN services. This has resulted in delays in discharging all new HPS patients from hospital; this situation may deteriorate further if the COVID-19 pandemic continues to impact partly due to increased staff sickness.

This document contains logistics of organising HPN in England, but the other included principles apply to all four nations, including optimising oral/enteral nutrition in this cohort of patients.

Key points

1. Prior to discharge HPN patient requiring a compounded regimen will need to be authorised by NHS England. Trusts can contact HPN suppliers directly for new patients requiring a multi-chamber bag (MCB) and/or intravenous fluids.
2. All Nutrition Support Teams (NSTs) may be asked to review patient suitability for 24-hour HPN with one connection daily.
3. Establish how long it is likely to take to set a patient up on HPN.
4. Optimise the enteral route especially in those with intermittent or partial small bowel obstruction. Low fibre/liquid diets may reduce obstructive episodes.
5. Consider insertion of a nasogastric draining tube or a venting gastrostomy to help manage nausea/vomiting.
6. Arrange Telemedicine or outpatient clinic follow up within 2-4 weeks from discharge.

Explanations

1. **Authorisation:** A multi-professional group of clinicians and commissioners meet twice a week to review all requests, including sterile fluids and homecare nursing support. This NHSE HPN Clinical Cell has been reviewing new patient applications for compounded slots since September 2019, and multi-chamber bags (MCBs) since April 2020, as the supply of MCBs across the whole market is now more stable this has been revised and NHSE clinical cell will only review requests for compounded HPN regimens. From 1 June 2020, trusts can contact HPN suppliers directly for new patients requiring MCBs. Compounded slots for all patients will continue to be allocated by the HPN Clinical Cell. The application form to the HPN Clinical Cell for a compounded slot for a HPN patient and supporting documents are on '*Our Future NHS Parenteral Nutrition Workspace*'.

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The HPN centre /IF centre will need to be registered to complete this submission (<https://future.nhs.uk/system/login?nextURL=%2Fconnect%2Eti%2Fsystem%2Fuserhome>). Local HPN/IF centres are informed within 2 working days of the outcome. Following allocation of a homecare company, the local HPN centre will submit a final HPN prescription to the homecare company and a discharge date agreed with the patient. This is usually within 5 working days but may be longer during the pandemic and the current challenges within the provision of home PN.

2. **Once daily connections:** Where training would delay discharge, community nursing care should be utilised, either via homecare or in some regions via district nursing teams. Training of patients/families can then be completed at home following discharge if appropriate. Discharge should not be delayed for training. It is envisaged that most advanced malignancy HPN patients will be supported with home community nursing care, except in Northern Ireland, North East of England and Scotland where no homecare nursing provision is available and district nurse training may be required.
3. **Time to set up HPN:** Speak to your local HPN/IF service as they will have an idea of the national situation with respect to the provision of HPN. The COVID-19 pandemic has impacted the supply of HPN, the availability of nursing support and the work being undertaken by hospital IF teams. Each IF team will be able to outline whether they are accepting referrals, the service they are able to provide and possible timeframe. The whole referral process may take weeks to set up, requiring transfer of the patient or may be supported remotely. If the referral is made, then it is advisable for the patient to have an appointment with the HPN or integrated IF centre through telephone or a virtual clinic before discharge.
4. **Optimise oral/enteral feeding:** There is an urgency to frequently review and optimise the enteral route in those with advanced malignancy. These may include the following:
 - **Oral liquids, including whole protein or peptide sip feeds** – In the case of bowel obstruction these may be considered if nasogastric or gastrostomy outputs indicate that some absorption may be taking place. This may be established with monitoring of fluid balance and blood biochemistry.
 - **Low fibre liquids/textures** could be considered for patients with a drainage tube. Guidance must be sought from the dietitian.

The Dietetic Departments at The Christie NHS Foundation Trust, The Royal Marsden NHS Foundation Trust and The Royal Surrey County Hospital have developed a staged best practice clinical approach (unfortunately there is little research evidence), which can be shared with other Dietetic Departments on request from NutritionandDietetic@christie.nhs.uk and rmdieteticschelsea@nhs.net or rsch.oncologydietitians@nhs.net. There is limited evidence on the use of elemental diets in obstruction, however, there is currently a clinical trial being undertaken (NCT 03150992). At present we do not recommend them.

- **Enteral tube feeding** – The administration of fluids and or enteral feeds (whole or peptide) via an enteral tube feed such as nasogastric, gastrostomy or jejunostomy. Enteral tube feeding should only be considered when obstruction is sub-acute or intermittent.
 - A double lumen tube should be considered for drainage and feeding particularly in the case of upper gastro-intestinal obstruction.
5. **Draining/venting tubes:** Patients may require a venting nasogastric tube or gastrostomy to help manage the symptoms of obstruction and reduce vomiting. For a venting tube to be effective it must be sufficiently large to enable free flow or aspiration of gastric contents. Patients must be taught how to care for the tube, aspirate gastric contents and have clear guidance on the actions to be taken if the tube is blocked or displaced. All equipment and connectors must be checked for compatibility to ensure that the drainage system is effective and manageable.
 - Patients should be given clear written advice on oral intake too, after discussion with the medical/surgical team and the dietitians. Patients may wish to take fluids/foods for taste and comfort. Patients and teams should be aware that any information provided is guidance and that oral intake may make symptoms worse.
 6. **Follow up/monitoring:** Follow up should be arranged on a case-by-case basis, but it is envisaged that for patients discharged home that an out-patient appointment is made within 2-4 weeks. For those patients discharged to a hospice, liaison with the palliative care team is likely to be enough to meet patient's ongoing follow up needs. In the case of longer surviving patients (>3 months) follow up should be made based upon clinical requirements and will depend upon the patient's condition. The standard HPN monitoring tests are recommended as defined by the HPN centre.

Suggested reading:

- Naghibi M, Woodward J, Neild P and the BIFA Committee. Palliative parenteral nutrition (HPN) for patients with malignancy. British Intestinal Failure Alliance (BIFA) Position Statement April 2020: www.bapen.org.uk/pdfs/bifa/position-statements/position-statement-on-palliative-hpn-for-patients-with-malignancy.pdf
- Information for home parenteral nutrition (HPN) patients Updated 27 March 2020 with the latest government advice on keeping yourself safe. Accessed on PINNT website 28th May 2020: <https://pinnt.com/News/News/Non-Members/NHS.aspx>
- Farrer K, Cawley C, Page A, Taylor M and the BIFA Committee. Top Tips for Discharging a Patient on Home Parenteral Support in England: www.bapen.org.uk/pdfs/bifa/bifa-top-tips-series-8.pdf