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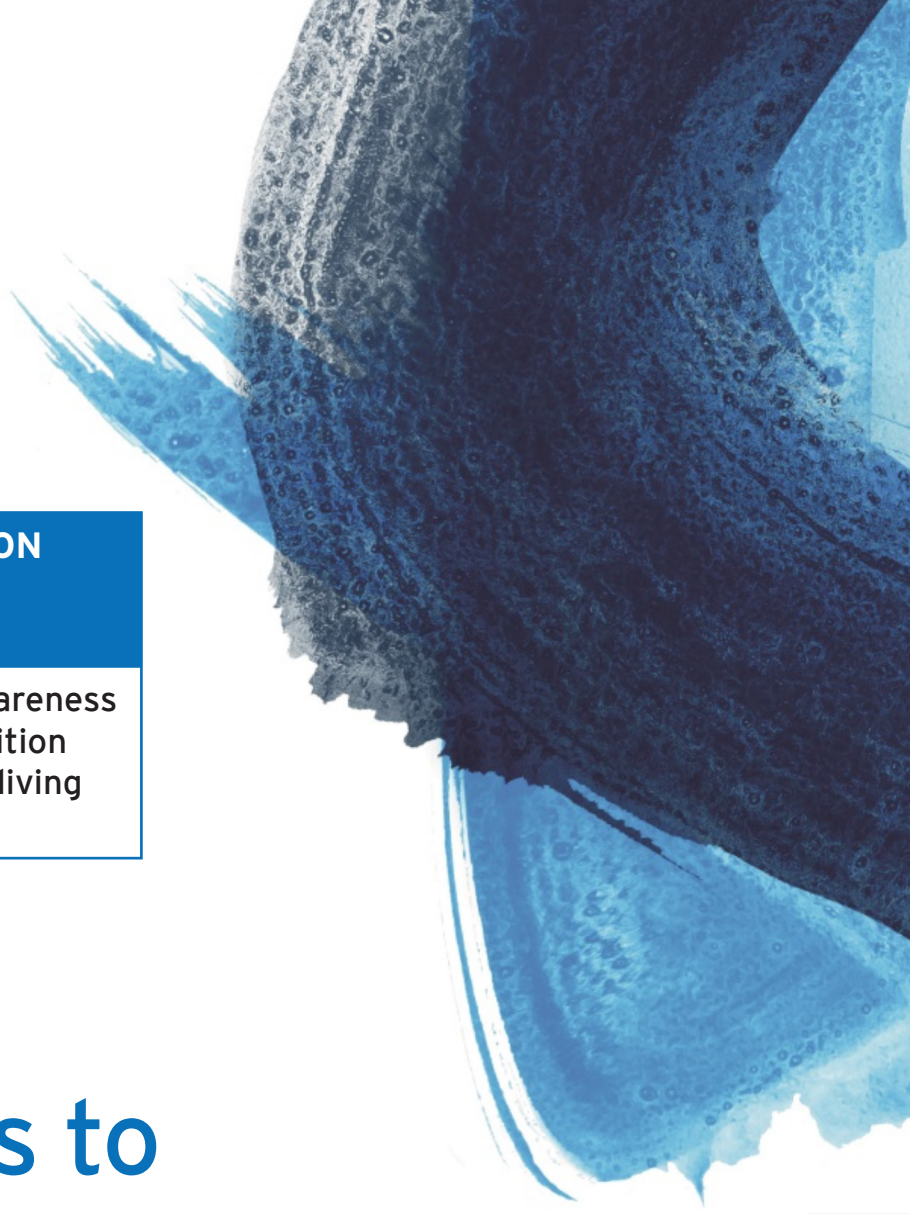

HOME ARTIFICIAL NUTRITION AWARENESS (HAN) WEEK starts on 3rd August 2020

A week dedicated to raising awareness about essential life-saving nutrition treatments received by people living in the community, at home.

Top 5 points to consider when treating an Intestinal Failure patient

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1 **Understand the definition and classification of Intestinal Failure (IF) – not all nutrition is IF.** It is common for patients with poor nutrition to be incorrectly labelled as IF patients. The European Society of Clinical Nutrition and Metabolism (ESPEN) document from 2015 is very useful. [i] IF is defined as the *reduction of gut function below the minimum necessary for the absorption of macronutrients and/or water and electrolytes, such that intravenous supplementation is required to maintain health and/or growth*. The reduction of gut absorptive function that does not require intravenous supplementation to maintain health and/or growth, can be considered as "intestinal insufficiency". The classification of IF has different groups including functional (Type 1, 2, 3), pathophysiological (short bowel, intestinal fistula, dysmotilty, obstruction and extensive small bowel disease) and clinical classification (based on energy and volume of intravenous supplementation).

2 **Always remember the importance of excluding sepsis.** This probably remains one of the most important considerations in managing IF patients. The therapeutic approach SNAP (Sepsis, Nutrition, Anatomy and Plan) is very useful and should be considered in all IF patients. [ii] Although sepsis can be easy to diagnose (e.g. pyrexia, raised leucocyte count, raised inflammatory markers), there are also more subtle measures such as raised bilirubin and failure to thrive. The cause for sepsis can be multifactorial but if suspicion arises that sepsis is present then routine tests (bloods, blood cultures, CXR and urine testing) should occur. Other considerations include CT/MRI imaging (that may need to exclude bone infections) and echocardiography. Rarely CT PETs are required to exclude inflammatory or obscure septic sources. It is important to consider that not all pyrexia or raised inflammatory markers are due to sepsis. Other causes should be considered such as antibiotic or drug induced inflammatory conditions and factious causes.

3 **Do not just treat High Output Stoma (HOS) – think of aetiology.** Often patients commence pharmacological treatment before considering the aetiology for HOS. The pharmacological treatment can be successful and includes Proton Pump Inhibitor (PPI) therapy for approx. 6 months, Loperamide (max 16mgs qds 30 mins pre food), Codeine (max 60mgs qds 30 mins pre food) and electrolyte solutions (such as Dioralyte 8 sachets in 1000ml water sipped throughout the day). Most staff working with IF patients will be aware that sepsis, remaining length of small bowel, oral intake and post-obstruction episodes can cause HOS. However other causes to consider include pancreatic exocrine insufficiency, small bowel bacterial overgrowth, medications (e.g. recent sudden stoppage of steroids causing hypoadrenalism, motility agents such as metoclopramide), gastro-intestinal tract infection (e.g. Clostridium difficile).

4 Try to correctly define a Catheter Related Blood Stream Infection (CRBSI). The British Intestinal Failure Alliance (BIFA) has supportively produced recommendations to help diagnose CRBSIs. It is good practice to use these recommendations to help diagnose CRBSIs. Otherwise, there will be incorrect diagnosis of CRBSIs. [iii] Teams managing IF patients should discuss with their local microbiology teams whether they are able to provide either quantitative (e.g. pour plates) or qualitative (e.g. Differential Time to Positivity (DTP)). The DTP method diagnoses a CRBSI if the same organism is isolated from blood obtained through the catheter hub and from blood obtained from a peripheral vein and the DTP is more than 2 hours (catheter hub culture positive first). The pour plate method diagnoses a CRBSI if the same organism is isolated from blood obtained through the catheter hub has at least a 3 fold greater count of microbes compared to blood obtained from a peripheral vein. As part of quality improvement work in our IF unit we have developed a flow diagram to help with managing pyrexia in patients receiving Parenteral Nutrition (PN) via a central line – this ultimately has improved our diagnosis of CRBSIs. The flow diagram is placed beside observation charts for easy access – see Appendix 1. The two main practical points are that:

a) appropriate staff take the peripheral and central cultures
b) each specimen is correctly labelled.

These practices also help safeguard that the PN is stopped in this group of patients with pyrexia (as it is not possible to attach PN once it is removed to allow central blood cultures).

5 Do not underestimate the importance of psychology. The need for psychological support can range in requirements. Some patients may need high levels of psychological support. The psychological aspect of care is essential in trying to help the patient in their journey towards better health and quality of life. Patients with IF will often have significant needs and feel that they have "loss of control". Occasionally some of their behaviours can relate to a need for "control" as there are large aspects of their life/illness that they cannot influence. The psychology team can also offer support to the ward and IF team to try to help process the decisions made by patients.

References

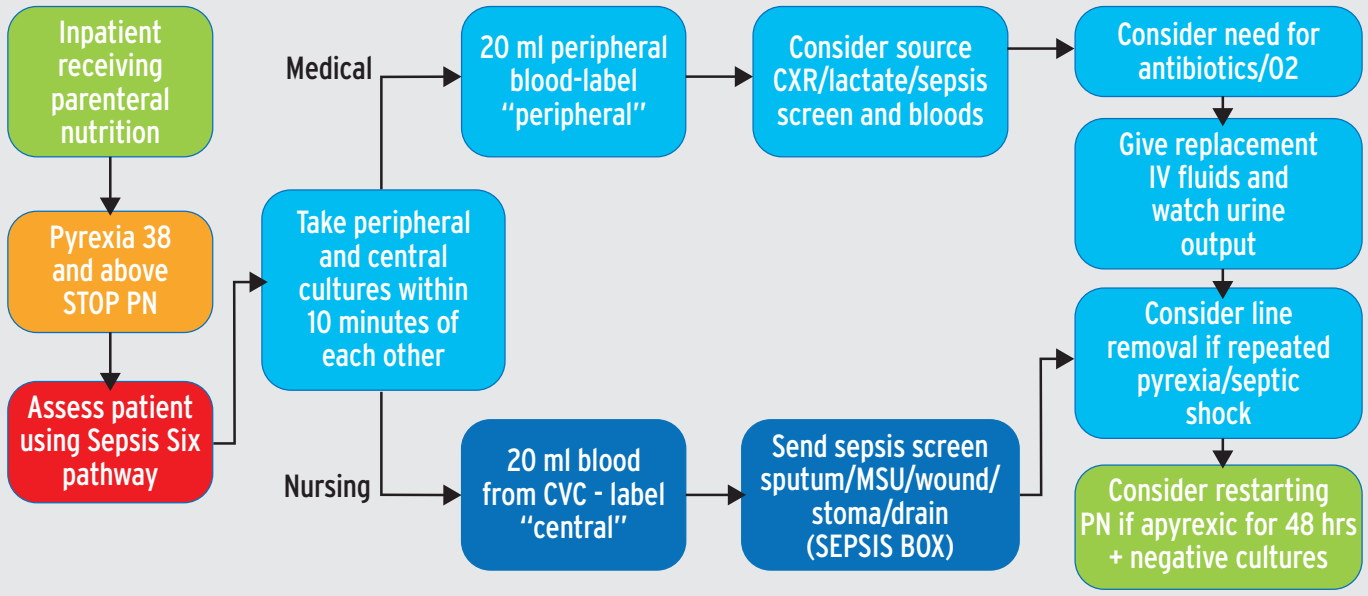
i) 1Peroni et al. ESPEN endorsed recommendations. Definition and classification of intestinal failure in adults Clinical Nutrition 34 (2015) 171e180

ii) Lal et al. Review article: intestinal failure. https://doi.org/10.1111/j.1365-2036.2006.02941.x

iii) Lal et al. British Intestinal Failure Alliance (BIFA) Recommendation. Diagnosis of Catheter Related Blood Stream Infections (CRBSIs). https://www.bapen.org.uk/pdfs/news/bifa-recommendations-for-crbsi-diagnosis-draft.pdf

Appendix 1

Protocol for Pyrexia in Inpatients on Parenteral Nutrition



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