

Nutrition and Hydration

Current Awareness Bulletin

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Supporting patients with meals and snack times while in hospital

The Patients Association

Through The Patients Association's project work with NHS England, patients and carers have identified several areas where NHS resources supporting meal and snack times in hospital could be strengthened or improved through minor amendments. Participants in a focus group said that NHS England's existing written resources for patients and staff were clear and helpful, but felt that some changes and additional information on the online portal, where the resources are accessed, could make them even better.

Access the report here - <https://shorturl.at/4Utdl>

Investigation report: nutrition management of acutely unwell patients in acute medical units

Health Services Safety Investigations Body

The purpose of this investigation was to support improvements in the identification of malnutrition and management of nutritional needs for patients within acute medical units (AMUs). AMUs are the first point of entry for patients referred to hospital as an acute medical emergency by their GP and those requiring admission from the emergency department. The investigation uses, as an example, a real patient safety incident in which a man's nutritional needs were not met for 19 days' stay in hospital, of which 13 days were in AMU, resulting in him losing up to 26% of his body weight within a six-week period.

The evolving role of dietitians in neonatal units and beyond

Smith M. *Paediatrics and Child Health* 2024;34(5):148-153.

This review will describe the vital role that neonatal dietitians can fulfil, from the unit level to the broader network level, in collaboration with families and the comprehensive multidisciplinary team. It highlights the importance of optimal neonatal dietetic staffing, both within neonatal units and in broader healthcare contexts, to achieve these objectives effectively.

1. The Impact of Nutrition on Pain: A Narrative Review of Recent Literature

Authors: Bautista, Alexander; Lee, Jordan; Delfino, Spender; LaPreze, Dani and Abd-Elsayed, Alaa

Publication Date: /06/14/ ,2024

Journal: Current Pain and Headache Reports

Abstract: Purpose of Review: Pain is a complex phenomenon that affects millions of individuals worldwide and poses a significant burden on public health. While pain management typically focuses on pharmacological and physical interventions, emerging research suggests that nutrition plays a crucial role in pain modulation. This narrative review aims to explore the relationship between nutrition and pain, providing a comprehensive overview of recent literature. The review covers various dietary factors, including macronutrients, micronutrients, dietary patterns, and specific dietary interventions. Additionally, the potential mechanisms underlying the impact of nutrition on pain are discussed. The findings highlight the potential for dietary interventions to complement traditional pain management approaches and provide

valuable insights for future research and clinical practice.; Recent Findings: Literature suggested the impact of healthy nutrition on improvement in pain and that certain types of food may increase and worsen different pain conditions. Nutrition plays an important role in modulating pain. It is important to counsel patients in pain on best diet for their pain condition to alleviate pain. Our article summarizes very well the issue of nutrition and pain and provides a guide to all practitioners caring for patients with chronic pain. (© 2024. The Author(s), under exclusive licence to Springer Science+Business Media, LLC, part of Springer Nature.)

2. Parenteral nutrition in the hospital setting/short-term parenteral nutrition

Authors: Cogle, Sarah V.;Ayers, Phil;Berger, Mette M.;Berlana, David;Wischmeyer, Paul E.;Ybarra, Joe;Zeraschi, Sarah and De Cloet, Joeri

Publication Date: /06/13/ ,2024

Journal: American Journal of Health-System Pharmacy : AJHP : Official Journal of the American Society of Health-System Pharmacists 81, pp. S102-S111

Abstract: Purpose: This article is based on presentations and discussions held at the International Safety and Quality of Parenteral Nutrition (PN) Summit concerning the acute care setting. Some European practices presented in this article do not conform with USP general chapter requirements. Nevertheless, the purpose is to cover the challenges experienced in delivering high-quality PN within hospitals in the United States and Europe, in order to share best practices and experiences more widely.; Summary: Core issues regarding the PN process within an acute care setting are largely the same everywhere: There are ongoing pressures for greater efficiency, optimization, and also concurrent commitments to make PN safer for patients. Within Europe, in recent years, the use of market-authorized multi-chamber bags (MCBs) has increased greatly, mainly for safety, cost-effectiveness, and efficiency purposes. However, in the US, hospitals with low PN volumes may face particular challenges, as automated compounding equipment is often unaffordable in this setting and the variety of available MCBs is limited. This can result in the need to operate several PN systems in parallel, adding to the complexity of the PN use process. Ongoing PN quality and safety initiatives from US institutions with various PN volumes are presented. In the future, the availability of a greater selection of MCBs in the US may increase, leading to a reduction in dependence on compounded PN, as has been seen in many European countries.; Conclusion: The examples presented may encourage improvements in the safety and quality of PN within the acute care setting worldwide. (© American Society of Health-System Pharmacists 2024.)

3. A Pilot Study to Determine the Effect of Individualized Enteral Nutrition Management Based on Prognostic Nutrition Index on Surgical Patients With Oral Malignancies

Authors: Ding, Chunbo;Chen, Long;Gu, Hedan;Xu, Bin and Du, Yaqin

Publication Date: /07// ,2024

Journal: Nutrition & Cancer 76(6), pp. 513-520

Abstract: This study aimed to assess the effect of individualized enteral nutrition management based on the prognostic nutrition index (PNI) on surgical patients with oral malignancies. This quasi-experimental pilot study consecutively included patients diagnosed with oral malignancies who underwent radical surgery in Ningbo No. 2 Hospital between January 2020 and May 2023. The primary outcome was PNI. A total of 71 patients with oral malignancies

were enrolled, and 35 patients received PNI-based individualized enteral nutrition management. The PNI group displayed significantly higher PNI than the routine enteral nutrition support group (1st week postoperatively: 39.86 ± 3.86 vs. 37.29 ± 4.23 , $p < 0.001$. 2nd weeks postoperatively: 44.17 ± 4.36 vs. 40.72 ± 3.40 , $p < 0.001$). The surgical suture removal time and length of hospital stay (both $p < 0.001$) in the PNI group were significantly shorter than in the routine enteral nutrition support group. At 1 month postoperatively, the PNI group had significantly higher scores of QoL ($p = 0.002$) than the routine enteral nutrition support group. The individualized enteral nutrition management based on the PNI could improve the nutritional status of postoperative patients with oral malignancy, which could facilitate postoperative rehabilitation and improve overall QoL.

4. Outcomes after intervention for enteral nutrition in patients with amyotrophic lateral sclerosis in multidisciplinary clinics

Authors: Fullam, Timothy; Hunt, Suzanne L.; Han, Madison; Denesia, Jacob; Chandrashekhar, Swathy; Jawdat, Omar; Piccione, Ezequiel; Fernandes, J. A. and Statland, Jeffrey

Publication Date: /07// ,2024

Journal: Muscle & Nerve 70(1), pp. 94-100

Abstract: Introduction/aims: Patients with amyotrophic lateral sclerosis (ALS) are susceptible to malnutrition, with appropriate management of nutritional interventions an active area of investigation. We sought to determine the impact of gastrostomy tube placement in ALS patients, exploring the correlation between forced vital capacity (FVC), malnutrition, and perioperative complications.; Methods: A retrospective review was performed of clinically diagnosed ALS patients treated at two multidisciplinary clinics (University of Kansas, University of Nebraska) from January 2009 to September 2020 who were referred for gastrostomy. Data collected included demographics, disease characteristics, and key gastrostomy related dates/outcomes.; Results: Two hundred thirty-nine patients were included with a median age of 65 years and median of 589 days from symptom onset to gastrostomy (interquartile range, 404-943). The population was predominantly Non-Hispanic White with bulbar-onset ALS. 30-day mortality was 4% and 30-day morbidity was 13%. Weight loss, body mass index, and predicted FVC at placement showed no increased 30-day morbidity or mortality association. Bulbar-onset ALS patients exhibited higher overall mortality postplacement than limb onset (odds ratio: 1.85, 95% confidence interval: 1.03-3.33). There was a 5% incidence of symptoms suggestive of refeeding syndrome.; Discussion: Rates of major/minor complications and 30-day mortality related to gastrostomy placement in our population were similar compared with prior studies in ALS. The lack of difference in outcomes based on FVC at procedure may suggest this is not predictive of outcome, or perhaps, high-quality perioperative respiratory management. Alternative reasons may account for the increased morbidity and mortality of gastrostomy placement in the ALS population. (© 2024 Wiley Periodicals LLC.)

5. Evidence-based guidelines for intrapartum maternal hydration assessment and management: A scoping review

Authors: Kearney, Lauren; Craswell, Alison; Dick, Nellie; Massey, Debbie and Nugent, Rachael

Publication Date: /06// ,2024

Journal: Birth: Issues in Perinatal Care 51(2), pp. 253-263

Abstract: Problem: Inconsistent practice relating to intrapartum hydration assessment and management is reported, and potential harm exists for laboring women and birthing persons. Background: Labor and birth are physically demanding, and adequate nutrition and hydration are essential for labor progress. A lack of clear consensus on intrapartum hydration assessment and management during labor and birth currently exists. In addition, there is an inconsistent approach to managing hydration, often including a mixture of intravenous and oral fluids that are poorly monitored. Aim: The aim of this scoping review was to identify and collate evidence-based guidelines for intrapartum hydration assessment and management of maternal hydration during labor and birth. Methods: PubMed, Embase, and CINAHL databases were searched, in addition to professional college association websites. Inclusion criteria were intrapartum clinical guidelines in English, published in the last 10 years. Findings: Despite searching all appropriate databases in maternity care, we were unable to identify evidence-based guidelines specific to hydration assessment and management, therefore resulting in an "empty review." A subsequent review of general intrapartum care guidelines was undertaken. Our adapted review identified 12 guidelines, seven of which referenced the assessment and management of maternal hydration during labor and birth. Three guidelines recommend that "low-risk" women in spontaneous labor at term should hold determination over what they ingest in labor. No recommendations with respect to assessment and management of hydration for women undergoing induction of labor were found. Discussion: Despite the increasing use of intravenous fluid as an adjunct to oral intake to maintain maternal intrapartum hydration, there is limited evidence and, subsequently, guidelines to determine best practice in this area. How hydration is assessed was also largely absent from general intrapartum care guidelines, further perpetuating potential clinical variation in this area. Conclusion: There is an absence of guidelines specific to the assessment and management of maternal hydration during labor and birth, despite its importance in ensuring labor progress and safe care.

6. Patient and clinician perspectives on supported mealtimes as part of anorexia nervosa treatment: A systematic review and qualitative synthesis

Authors: Komarova, Daria;Chambers, Kate;Foye, Una and Jewell, Tom

Publication Date: /07// ,2024

Journal: European Eating Disorders Review 32(4), pp. 731-747

Abstract: Objective: To systematically review the literature on clinicians' and patients' experiences of supported mealtimes in the treatment of anorexia nervosa. Method: This systematic review was conducted in accordance with PRISMA guidelines and registered on PROSPERO (CRD42022372565). PsycINFO, MEDLINE and Embase were searched up to the 20th of November 2023 for qualitative articles investigating the perspectives of healthcare professionals and patients on clinician-supported meals across all clinical settings. Data were analysed using thematic synthesis. The Critical Appraisal Skills Programme was used to evaluate the quality of selected studies. Results: This review comprised of 26 studies; eight concerned with the perspectives of clinicians only, 16 addressing patients' views, and two studies exploring the views of both groups. Experiences of both groups were generally negative, and three overlapping themes were identified: lack of consistency in care provided, high levels of negative emotions and an uncomfortable power dynamic. Conclusions: This review suggests that supported mealtimes are experienced more positively by patients when rules are clear and consistently enforced, and when clinicians make informal conversation and supportive comments. Our findings highlight the need for best practice guidelines and clinician training to improve the delivery of supported mealtimes. Such guidelines and training should

be coproduced in collaboration with patients and carers. Highlights: Supported mealtimes are a core aspect of anorexia nervosa treatment, however, there are currently no guidelines or evidence-based protocols for how this intervention should be conducted. This review revealed that both patients and clinicians consider supported mealtimes an invaluable part of treatment, identifying several positive aspects of the intervention, such as valuable emotional support, strict rules and increasing responsibility-taking. This review also highlights negative experiences of supported mealtimes for both clinicians and patients due to high levels of adverse emotions, inconsistency in the delivery of care and a power dynamic akin to "policing".

7. Parenteral nutrition in clinical practice: International challenges and strategies

Authors: Wischmeyer, Paul E.; Klek, Stanislaw; Berger, Mette M.; Berlana, David; Gray, Brenda; Ybarra, Joe and Ayers, Phil

Publication Date: /06/13/ ,2024

Journal: American Journal of Health-System Pharmacy : AJHP : Official Journal of the American Society of Health-System Pharmacists 81, pp. S89-S101

Abstract: Purpose: Parenteral nutrition (PN) is an established therapy when oral/enteral feeding is not sufficient or is contraindicated, but nevertheless PN remains a complex, high-alert medication that is susceptible to errors that may affect patient safety. Over time, considerable progress has been made to make PN practices safer. The purpose of this article is to address ongoing challenges to improve the PN use process from prescription to administration and monitoring, and to outline practical aspects fostering the safety, quality, and cost-effectiveness of PN, as discussed at the International Safety and Quality of PN Summit.; Summary: Opportunities to improve the PN use process in clinical practice include the promotion of inter-disciplinary communication, vigilant surveillance for complications, staff education to increase competency, and more consistent use of advanced technologies that allow automated safety checks throughout the PN process. Topics covered include considerations on PN formulations, including the value of intravenous lipid emulsions (ILEs), trends in compounding PN, the current and future role of market-authorized multi-chamber PN bags containing all 3 macronutrients (amino acids, glucose/dextrose, and ILE) in the United States and in Europe, and strategies to cope with the increasing global problem of PN product shortages.; Conclusion: This review outlines potential strategies to use in clinical practice to overcome ongoing challenges throughout the PN use process, and ultimately promote PN patient safety. (© American Society of Health-System Pharmacists 2024.)

Sources Used:

The following databases are used in the creation of this bulletin: Amed, British Nursing Index, Cinahl & Medline.

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