



A.S.P.E.N. Pediatric Section Newsletter

Spring 2014

Letter from the Pediatric Section Chair

Greetings Members of the Pediatric Section Community,

Welcome to the initial installment of the A.S.P.E.N. Pediatric Section Newsletter! In an effort to communicate the latest information in pediatric nutrition support, the Section is now offering a quarterly newsletter highlighting important aspects of nutrition support for pediatric patients. You will find summaries of recent pediatric articles, clinical pearls, research endeavors and much more. I encourage you to submit quality improvement projects and research findings from your institution to be included in the publication. It is by creating a network of shared ideas that we can enhance our care of pediatric patients. Contact information for submissions is available within the document. On behalf of the Leadership Team, we hope you enjoy this new member benefit and we look forward to receiving your input.

The Pediatric Section of A.S.P.E.N., which consists of 769 members, has a long history of being very involved within the A.S.P.E.N. community. Members of the Section serve on a variety of A.S.P.E.N. committees, such as the Abstract Review Committee, Clinical Guidelines Editorial Board, CNW Monitoring Committee, and many others. Plus, the Section is actively involved in program proposal submissions for CNW. At CNW 2014 there were eight pediatric educational sessions and three pediatric focused learning sessions. It is this involvement that makes A.S.P.E.N. such a strong interdisciplinary organization and the Section so diverse in knowledge and expertise. However, despite this great participation, we still want to grow our Section and make it more vibrant. If you would like to become more involved or have ideas of how we could do so please do not hesitate to contact me directly.

"Teamwork is the ability to work together toward a common vision. The ability to direct individual accomplishments toward organizational objectives. It is the fuel that allows common people to attain uncommon results." - Andrew Carnegie

Sincerely,

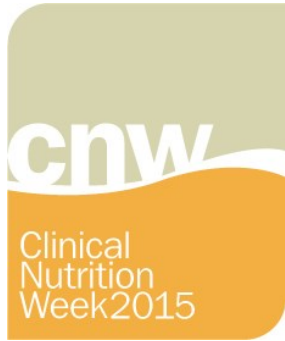
Elizabeth Bobo, MS, RD, LD/N, CNSC

Pediatric Section Chair

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Member Updates and Spotlight

We want to hear from you! The A.S.P.E.N. Pediatric Section group is proud of the many accomplishments of our members and we'd like to highlight what you're doing. If you have any noteworthy awards, presentations, published research, or projects that you'd like to share with our members please let us know by contacting the section group newsletter editor Celina Scala at Celina_M_Scala@rush.edu.



Clinical Nutrition Week 2015 Submissions

We would like to recognize the following pediatric section group members who have submitted proposals for Clinical Nutrition Week 2015 Programs. Thank you for your initiative!

Kelly Green-Corkins
Elizabeth Bobo
Petrea Cober
Steven Yannicelli
Timothy Sentongo
Beth Lyman
Steve Plogsted

NOVEL Project Update

Much is still happening with the New Opportunities for Verification of Enteral tube Location (NOVEL) project. Here is a quick update on what is happening and some participation opportunities:

- The NG tube prevalence study is currently in the data collection phase. We have extended this until around June to accommodate centers who are still dealing with their IRB process. If your hospital is interested in participating, contact Beth Lyman at blyman@cmh.edu as there is still time to become involved. To date, we have 130 hospitals in various phases of participation.
 - Preliminary results show a much wider use of NG tubes we predicted. Most of these patients are in a NICU.
 - There seems to be no standard approach to verifying placement of these tubes.
- We have **two research work groups forming** to expand the body of evidence regarding NG tube placement verification.
 - A **pediatric homecare** point prevalence study is being designed much like the pediatric inpatient one that is underway. There is no data on this in the literature. We are looking for pediatric homecare agencies to participate in working on the study design or just in participating as a data collection site. If you have a pediatric population who have NG tubes at home or know of someone who might be interested, please contact Candice Moore RN at candy.moore@cchmc.org.
 - A prospective randomized clinical trial in **NICU** patients is being designed to compare 2 approaches to NG tube placement verification. If you have access to a large NICU population and are interested in participating in this work group, please contact Kerry Wilder RN at Kerry.Wilder@childrens.com.

Pediatric Research Updates

Defining Pediatric Malnutrition: A Paradigm Shift Toward Etiology-Related Definitions

An interdisciplinary A.S.P.E.N. work group completed a review of existing pediatric malnutrition definitions and literature. Malnutrition from under-nutrition was the focus of this article. A consensus was developed on elements that constitute a definition of pediatric malnutrition and the group proposed a new pediatric malnutrition definition.

[JPEN-Defining Pediatric Malnutrition: A paradigm Shift Toward Etiology-Related Definitions](#)

Mehta N, Corkins M, Lyman B, et al. Defining Pediatric Malnutrition: A paradigm Shift Toward Etiology-Related Definitions. *Journal of Parenteral & Enteral Nutrition*. 2013;37(4):460-481.

Protocol-Driven Enteral Nutrition in Critically Ill Children: A Systematic Review

The researchers completed a systematic review of randomized controlled trials and observational studies of enteral nutrition protocols in pediatric intensive care units. The evidence was assessed using the Grading of Recommendations Assessment, Development, and Evaluation (GRADE) method. Researchers found that there is low level of evidence to support that enteral protocols decreased gastrointestinal and infectious complications and improved time in which feeds were initiated or goal feeds were achieved. The small number of studies available emphasizes that more research

is needed in this area.

[JPEN-Protocol-Driven Enteral Nutrition in Critically Ill Children: A Systematic Review](#)

Wong J, Ong C, Han W, Lee J. Protocol-Driven Enteral Nutrition in Critically Ill Children: a Systematic Review. *Journal of Parenteral & Enteral Nutrition*. 2014;38(1):29-39.

Comparison of Predictive Equations and Measured Resting Energy Expenditure Among Obese Youth Attending a Pediatric Healthy Weight Clinic: One Size Does Not Fit All

This study used a portable indirect calorimeter to determine measured resting energy expenditure (MREE) on 80 patients at a pediatric healthy weight clinic. Subjects had a BMI for age and gender above the 85th percentile and range from age 7-18 years. Nine predictive equations were also used to calculate each patient's resting energy expenditure (REE). Results from both the MREE and REE were compared to determine which predictive equation was most accurate. This study found that the Harris-Benedict equation best predicted the needs of the subjects based on the MREE while the WHO equation was the least accurate.

[NCP-Comparison of Predictive Equations and Measured Resting Energy Expenditure Among Obese Youth Attending a Pediatric Healthy Weight Clinic: One Size Does Not Fit All](#)

Henes S, Cummings D, Hickner R, et al. Comparison of Predictive Equations and Measured Resting Energy Expenditure Among Obese Youth Attending a Pediatric Healthy Weight Clinic: One Size Does Not Fit All. *Nutrition in Clinical Practice*. 2013;38:617-624.

A.S.P.E.N. Clinical Guidelines: Support of Pediatric Patients with Intestinal Failure at Risk of Parenteral Nutrition-Associated Liver Disease

These guidelines, compiled by an interdisciplinary A.S.P.E.N. work group, identified and answered four questions about the care of patients with intestinal failure at risk for parenteral nutrition-associated liver disease (PNALD). A systematic review of available literature was completed and studies were evaluated using the Grading of Recommendations Assessment, Development, and Evaluation (GRADE) method.

Question 1: Is ethanol lock effective in preventing blood-stream infection and catheter removal in children at risk of PNALD?

Recommendation: Yes.

Question 2: What fat emulsion can be used in pediatric patients with intestinal failure to reduce the risk or of treat PNALD?

Recommendation: Use soy-based fat emulsions since they are the only one available for use in the US at this time, at a dose of less than or equal to 1 g/kg/day.

Question 3: Can enteral ursodeoxycholic acid (UDCA) improve the treatment of PNALD in pediatric patients with intestinal failure?

Recommendation: Use UDCA with the knowledge that the existing literature on its effectiveness may not generalize to patient's with intestinal failure.

Question 4: Are PNALD outcomes improved when patients are managed by a multidisciplinary intestinal rehabilitation team?

Recommendation: The suggestion is for the referral of patients to a multidisciplinary intestinal rehabilitation team.

All evidence for the answers to the four questions was found to be low or very low and the strength of all 4 recommendations are weak.

[JPEN-A.S.P.E.N. Clinical Guidelines: Support of Pediatric Patients With Intestinal Failure at Risk of Parenteral Nutrition-Associated Liver Disease](#)

Wales P, Allen N, Worthington P, et al. A.S.P.E.N. Clinical Guidelines: Support of Pediatric Patients With Intestinal Failure at Risk of Parenteral Nutrition-Associated Liver Disease. *Journal of Parenteral & Enteral Nutrition*. 2014; published online April 4, 2014. DOI: 10.1177/0148607114527772.

A.S.P.E.N. News

NEW!! A.S.P.E.N. Mentoring Program

Are you interested in sharing your experience and expertise with another A.S.P.E.N. member? Would you like to learn from a fellow A.S.P.E.N. clinician? If so A.S.P.E.N.'s new mentoring program is right for you! Set up a profile as either a mentor or mentee at the link below to be paired with another A.S.P.E.N. clinician. Don't miss this great opportunity to network and grow both personally and professionally.

[A.S.P.E.N. Mentoring Program](#)



Upcoming Pediatric Webinars:

August 20, 2014 Pediatric Critical Care

September 10, 2014 Enteral Nutrition in Neonates/Infants

To register for the webinars, [click here](#).