

Pediatric Section Newsletter

Winter 2017

Letter from the Pediatric Section Chair



Hello,

I am trying to get organized for Clinical Nutrition Week. As I am reviewing the sessions at CNW, there are quite a few related to pediatrics. I have sent an email with a special invitation to all section members to the Pediatric Section Forum and the Pediatric Section Planning Meeting. These are great opportunities to network and meet people with common interests. Also, I would like to invite members to the **NOVEL project meeting on Feb. 19th at 3-4pm in the Grand Ballroom**. Some products that came out of the NOVEL project will be presented and Beth Lyman would love to hear your thoughts.

If you are not able to attend CNW and would like to contribute ideas for CNW18 and would like to write a proposal, please send me an email: kgcorkins@yahoo.com. We are always looking for new ideas. If you have never written a proposal, I can connect you with someone to help.

Looking forward to this year.

Sincerely,



Kelly Green Corkins, MS, RD, LDN, CNSC

[Contents](#)

Clinical Nutrition Week 2017 Information-

Page 2

NEW! Pediatric Section on LinkedIn- Page 2

Research Updates- Page 3

Pediatric Section Microsite

Visit the Pediatric Section microsite to access past versions of the newsletter, current research updates, and much more!

[Pediatric Section Microsite](#)

Clinical Nutrition Week 2017, February 18-21 Orlando, Florida

We hope many of you are able to attend Clinical Nutrition Week 2017. It promises to be another wonderful conference full of cutting edge courses, nutrition product information and networking opportunities. If you haven't registered yet there is still time to do so. If you are unable to be in Orlando you can still attend sessions with Virtual Registration. Visit this link for all registration information. [Clinical Nutrition Week Registration](#) There are 19 sessions with pediatric content. These sessions are identified with the teddy bear icon when looking at the conference program. For more information on these and all other sessions see the Preliminary Program on the A.S.P.E.N. website. [Clinical Nutrition Week 2017](#)

If you will be at Clinical Nutrition Week we encourage you to attend the Pediatric Section Forum on Monday, February 20th from 5:45 pm-7 pm in Crystal D-E. This is a great opportunity to network and meet the other members of the section. Oscar R. Herrera, Pharm.D., BCNSP will present on "Plasma Citrulline and its role in Pediatric GI Diseases". Dr. Herrera works in the Department of Clinical Pharmacy for the University of Tennessee Health Science Center at LeBonheur Children's Hospital in Memphis, TN. Dinner will be provided and the session will offer CE credit.

Also, mark your calendars to attend the Pediatric Section Planning Meeting on Sunday, February, 19th at 3:30-5 pm in the Grand Ballroom 11. This meeting is for the Section to plan for session proposals for CNW18. All are welcome to come and share ideas!

New! Pediatric Section on LinkedIn

Have you joined the new Pediatric Section in LinkedIn? It's the new way to use ASPENet. You need only a basic, free LinkedIn profile if you do not already have one. This is a great new way to connect with fellow sections members and communicate by posting to the group. Check it out! [Pediatric Section in LinkedIn](#)

New Opportunities for Enteral tube Location (NOVEL) project Update from Beth Lyman, RN, MSN, CNSC

I hope you all got a chance to look at our latest NOVEL Newsletter. We have an ambitious agenda for 2017 which involves expanding our message to groups we normally do not come into much contact with such as Joint Commission, hospital executives, etc. Our NICU multi-center study was not accepted for funding because the reviewers were not convinced NG tube misplacement is a real safety issue. This is simply unacceptable. We are going to write a position paper recommending the use of pH at the bedside to verify NG tube placement.

We continue to have inventors and engineers come to use with new or revamped ideas and prototypes. If you are interested in the NOVEL project and want to attend our meeting at CNW, consider yourself invited. It is Sunday, Feb. 19th. Please email Beth Lyman (blyman@cmh.edu) if you want to attend so we do not end up with 50 people in a room that will comfortably hold 20. ASPEN continues to support our efforts along with representatives from AACN, NANN, SPN, and the CHA PSO.

Pediatric GI Research Updates

Provided by Marisa Dzarnoski Riley, RD, CNSC

Oral Tocofersolan Corrects or Prevents Vitamin E Deficiency in Children With Chronic Cholestasis

Study Design: Prospective Observational

This study followed Vitamin E status in 274 children with chronic cholestasis, after treatment with a water-miscible Vitamin E medication called Vedrop - newly available in Europe. Children were followed over a median duration of 11 months, with at least two measures of Vitamin E obtained at 3 and 6 months after initiation of Vedrop. At baseline, a total of 52% of the children had Vitamin E deficiency and during the first three months of treatment nearly 90% of these patients reached appropriate Vitamin E status. Patients with a Progressive Familial Intrahepatic Cholestasis diagnosis were the only population to exhibit a lower response.

Thebaut A, Nemeth A, Le Mouhaer J, et al. Oral Tocofersolan Corrects or Prevents Vitamin E Deficiency in Children With Chronic Cholestasis. J Pediatr Gastroenterol Nutr. 2016;63:610-615.

Anemia in Pediatric Celiac Disease: Association With Clinical and Histological Features and Responses to Gluten-free Diet

Study Design: Retrospective

This study sought to elucidate a correlation between anemia and clinicohistopathological presentation of celiac disease in children. This study reviewed clinical, serological, and laboratory parameters in 455 patients with biopsy confirmed celiac disease. Eighteen percent of these children had anemia at time of diagnosis, as defined by low blood hemoglobin. These children were more likely to present with extraintestinal manifestations, had more severe small-bowel mucosal damage, and also tended to have more moderate/severe symptoms (although this last finding was not significant). Children with anemia at diagnosis also had higher median values for both TG2 antibodies and EmA. After 12 months, 92% of the anemic children had appropriate hemoglobin levels although median levels were still lower than that of the non-anemic children. Limitations to this study include: lack of assessment for dietary iron intake, relatively short term follow up, and limited consistency in obtaining laboratory parameters.

Rajalahti T, Repo M, Kivela L, et al. Anemia in Pediatric Celiac Disease: Association With Clinical and Histological Features and Responses to Gluten-free Diet. J Pediatr Gastroenterol Nutr. 2017; 64: e1-e6.

Neonatal Research Updates

Provided by Jackie Wessel, Med, RDN, CNSC, CSP, CLE

Systematic Review of the Human Milk Microbiota

Study Design: Systematic Review

This is a very complete review, using literature from 1964 to 2015. The bottom line is that *Streptococcus* and *Staphylococcus* are the most common bacteria genera in the microbiota of human milk. This may have been underestimated in prior reports.

Fitzstevens JL, Smith KC, Hagadorn JL, et al. Systematic Review of the Human Milk Microbiota. Nutr Clin Prac epub DOI: 10.1177/0884533616670250.

Got Bacteria? The astounding, yet not so surprising microbiome of human milk.

Study Design: Review

This is a practical review detailing what is known about the microbiome of human milk. While the previous article goes through the information study by study, this is a more user friendly article bringing readers up to date with the current literature and thoughts about the human milk microbiome. One interesting finding includes a discussion of the literature regarding variations in human milk microbiota between obese vs. healthy weight women. The article also confirms the finding that women undergoing elective c section have milk with different bacterial communities than those who have labored. This is an interesting article that I would recommend to fully understand this subject. They have also made a research agenda for topics that have insufficient literature behind them.

McGuire MK, McGuire MA. Got Bacteria? The astounding, yet not so surprising microbiome of human milk. Current Opin Biotechnol 2016, 2017, 44:63-68.

The Human Milk Oligosaccharide 2'fucosyllactose Attenuates the Severity of Experimental Necrotizing Enterocolitis by Enhancing Mesenteric Perfusion in the Neonatal Intestine.

Study Design: Animal study

Even this study is an experimental mouse study, it is still meaningful in looking at NEC. Approximately 20% of women are non-producers of 2' FL and that may have meaning to NICU clinicians in terms of possible thoughts about NEC prevention.

Good M, Sodhi CP, Yamaguchi Y, et al. The Human Milk Oligosaccharide 2'fucosyllactose Attenuates the Severity of Experimental Necrotizing Enterocolitis by Enhancing Mesenteric Perfusion in the Neonatal Intestine. Br J Nutr 2016; 116:1175-1187.

Impact of Human Milk Pasteurization on Gastric Digestion in Preterm Infants: a Randomized Controlled Trial

Study Design: Randomized Controlled trial

This study in preterm infants < 32 weeks gestation using their own mother's milk with and without pasteurization, evaluated the effect of pasteurization on gastric digestion with preterm infants. Each infant was his or her own control. It gives needed information on gastric digestion for preterm infants as some of this data contradicts earlier thoughts. Very technical but interesting article on many areas of preterm digestion.

De Oliveira SC, Bellanger A, Menard O, et al. Impact of Human Milk Pasteurization on Gastric Digestion in Preterm Infants: a Randomized Controlled Trial. Am J Clin Nutr 2017. Doi: 3945/1jcn.116.142539.

Neurology Research Updates

Neurology research updates provided by Lauren Kronisch, RDN.

Ketogenic diet and other dietary treatments for epilepsy

Study Design: Review

Seven randomized control trials studied a total of 427 children and adolescents on the ketogenic and other related diets. This review found seizures reduced up to 85% after 3 months on a 4:1 ketogenic diet (KD), and 55% with no seizures after being on a 4:1 KD for 3 months. Modified Atkins diet (MAD) studies found up to a 60% reduction in seizure frequency and up to 10% of participants were seizure-free after 3 months on the MAD diet. All related studies show the 4:1 KD to be the most efficacious in

seizure improvement, but the 4:1 also presents with highest probability for GI side effects. GI effects are shown to be the most common reason for diet cessation, along with non-compliance or lack of efficacy on seizure improvement.

Martin K, Jackson C, Levy R, Cooper P. Ketogenic diet and other dietary treatments for epilepsy. Cochrane Library. February 9, 2016. Available from: Rutgers Smith E-Library, Newark, NJ. Accessed 1/29/2017.

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](#)

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 feedback or ideas, 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 Scalacm@gmail.com.