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PROLACTA'S Bioscience of Breastmilk By: Coralee L. Agnas RNC-NIC, CCRN

An absolute PROLACTA sponsored event entitled : "Expanding Benefits of Human Milk with an Exclusive Human Milk diet for Very Low Birthweight infants" featuring the manufacturer's Clinical Advisory Board officer Ms. Amy Paradis NNP-BC, MSN,CNS as the guest speaker. This conference was held at Ruth Chris Steak House in Fresno last August 1, 2024 and was attended by 40 healthcare professionals in the valley - mainly CCANN members from VCH, SAMC, CRMC and Kaiser Permanente.

The speaker started her lecture on the concept of human milk feeding as a powerful defense against "dysbiosis" – which is a condition when good bacteria is out balanced by the bad bacteria in the

24 Edition



Amy Paradis NNP-BC,MSN,CNS

















gut and can lead to the destruction of the intestinal gut barrier called "tight junction or nexus" and could result to the absorption of some pathogenic bacteria from the intestinal lumen to systemic circulation and cause sepsis.

Human milk feeding enhance infant's immunity by the production of microbiome, immunoglobulins, macrophages along with other maternal immune cells like lysozymes, lactoferrin and cytokines that would provide source of protection in keeping the infant's intestinal epithelium integrity and function to its optimum. This exhibit prebiotic activity. The microbiota of Human Milk (HM) fed infants are enriched with health promoting bacteria.

An exclusive human milk diet (EHMD) is only achieved when 100% of proteins, fat and carbohydrates are derived from human milk and not from cow's milk.

It all started from the highest quality of donated breast milk that has passed the industry's criteria and standard to be taken to the US manufacturing facility for further testing and processing. The plant aims to inactivate disease causing pathogen while restoring the essential bioactive components of human milk to enhance infant's immunity and growth.

Prolacta introduced their current developed EHMD feeding protocol, the early fortification guidelines, the quicker way to advance feeds, technique of optimizing protein goals, introduction of HM calorie fortifier and the gradual transition to other manufacturer's recommended product as part of EHMD.

The speaker also elaborated on the MD Protocol, recommendations for high risk premature infants, added supplements and supports the concept to have least at 34 weeks on EHMD protocol before considering transition.

The early establishment of enteral feeding correlates positively to infant's long term neurodevelopmental outcome .In the recent evidenced based research study showed that infants and toddlers tend to exhibit a better cognitive, motor and language composite Bayley scores by the age of 18-22 months when the prior condition applies.

There is also an improved feeding tolerance to EHMD compared to other formula fed infants. Babies tend to have a better growth velocity.

By using Prolacta products, patient can achieve full feeds faster, early removal of intravenous lines, ameliorating the risk of NICU related comorbidities and the faster that infant can be discharged home.

For higher energy expenditure infants like RDS, BPD with other disease entity showing slow anabolic growth, Prolacta CR can be used. The manufacturing plant has a fortification strategy that would enhance bioactive content of a fresh, frozen and pasteurized milk specimens.

Speaker quipped : " It is true that Prolacta products are expensive but it is more expensive to have NEC." Considering the antibiotics, parenteral fluids, medications and all the risks and procedures that patient has to go through for a longer hospital stay.

Thank You PROLACTA for enriching information on Breastmilk !



Join us for an Educational Dinner with Amy Paradis, MSN, NNP-BC, CNS



 Expanding the Benefits of Human Milk with an Exclusive Human Milk Diet
When: Thursday, Aug 1, at 6:30pm
Whence: Ruth Chris Steakhouse 784×1 Milexitone eke, Prese, CA 9:3720

Prolacta

7844 N Blackstone Ave, Fresno, CA 93720

Sponsored by Piolacta Bioscience RSVP to Amy Gettz by 7/29/24. assertz//molacta.com



















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CCANN Spring Conference 2024

By : Hannah Gissler RN



Our journey began with breakfast and an exhibition from our sponsors, who provided samples and information on new and exciting products. Vendors included representatives from Cerave, La Roche-Posay, Mead Johnson Nutrition, Johnson & Johnson, Prolacta BioScience, Kentec Medical, Atom Medical, Mercury Medical, and Lofty Images.



Dr. Lerraughn Morgan, one of Valley Children's Pediatric Cardiologists seen most often in the NICU, kicked off our presentations with a review of Hypoplastic Left Heart Syndrome (HLHS) with a focus on prenatal and postnatal management of this condition. As discussed by Dr. Morgan, this heart defect can have a complicated and varied presentation, which makes its management very patient-specific. With proper prenatal care, HLHS can be detected prenatally with the anatomy scan as early as 18 to 22 weeks gestation, allowing members of the healthcare team to begin prenatal counseling and planning. For best outcomes, these infants need to be delivered at a center that can provide immediate PGE-1 and monitoring. The NICU team must remain vigilant for cardiac defects in infants with poor prenatal care which can present with hypoxemia, changes in heart sounds, respiratory distress with pulmonary venous congestion, poor perfusion and hypotension, lethargy, and end-organ injury. Dr. Morgan described postnatal management focusing on their multistage "palliative

procedures" that help to improve circulation. In the NICU, we often care for infants through Stage 1, the Norwood Procedure, however there are many situations where we continue to manage these patients through the Interstage period. During the Interstage, which extends until Stage 2 at approximately 4 months of age, the care team focuses on monitoring recovery, growth, and oxygenation and protecting circulation with medications.



Neonatologist, Dr. Indira Chandrasekar, moved our day along with a presentation on antibiotic stewardship in the NICU. She reviewed current AAP guidelines for antibiotic use for infants at risk for sepsis and advocated for the discontinuation of antibiotics in patients without positive signs of infection. Increased antibiotics-use in NICU patients, especially among our preterm infants, places them at risk for higher frequencies of complications including candidiasis and NEC, and can permanently alter their gut microbiome impacting life-long health outcomes.



Kamela Loo and Dr. Naisha Chokshi brought some competition to the conference with a test of our critical reasoning. They presented multiple case studies that





Dee Morris NNP Event EMCEE prompted discussions on Hemangiomas, PICC line management, VACTERL and CHARGE syndromes, diaphragmatic hernias, TEF, neonatal hyperglycemia, and SIADH.



After lunch, Linda Sepulveda, RN, RSN, a national Certified Legal Nurse Consultant, reviewed the importance of careful healthcare documentation in a court of law. She reinforced that as licensed healthcare providers, we are all accountable to follow the practice acts that guide our licenses and our documentation is the only way to prove we upheld the Standard of Care. Accurate and timely documentation is paramount for the protection of our licenses and correct reflection of the care provided.



Danielle Flores, RCP, CRS, the Clinical Respiratory Specialist for our NICU, presented on Valley Children's interdisciplinary approach to the management of Bronchopulmonary Dysplasia (BPD) and our team's involvement in the BPD Collaborative. BPD is a complicated form of Chronic Lung Disease seen in preterm infants associated with long-term morbidities and mortality. Danielle reviewed the criteria used for staging this disease and identifying patients continuing to rely on support at 36 weeks corrected gestational age. Infants that meet these criteria, require changes in airway and ventilator management that provide large volumes, slower rates, and longer inspiratory times to accommodate for lung and airway remodeling and changes in lung compliance.

A special thank you to all of our sponsors and presenters, as well as to our MC, Dee Morris, NNP-BC. Mark your calendars for our next in-person conference on October 12th!







Dinner at The Palms

By : Wanda Savage RN



On June 20, 2024, CCANN members were privileged to participate in an informational evening hosted by Mead Johnson Nutrition at the Palms Restaurant in Fresno. More than 40 individuals attended to learn about variations in the nutritional content of human milk.

While enjoying scrumptious appetizers, attendees heard from Clinical Dietician and previous Lactation Consultant, Julie Rodgers. She described the increased protein needs of premature infants and explained how tailored nutrition during their NICU care has been shown to improve cognitive and language scores in preemies later in development.

With dinner, a pre-recorded lecture by Brian Stansfield, MD from the Medical College of Georgia at Augusta University was shown. He reviewed the differences in the composition of preterm, term, and donor milk, highlighting their protein, sodium and zinc content. Variations in mothers' milk across racial groups were also discussed. Dr Stansfield referred to 2023 ESPGHAN guidelines, which recommend increased protein intake among premature infants. He also reviewed complications related to increased osmolality, both from feeds and from hyperosmolar supplements like multivitamins. Dr. Stansfield explained that providing a rate of growth equal to that observed in utero has proved beneficial to both short and long erm neurodevelopment of infant. To achieve this goal using the newest guidelines, fortification is needed.



A special thank you to the sponsor of this event, Mead Johnson Nutrition, who provided samples of human milk fortifiers for participants to practice handling and measuring. Ross, the long-term MJ rep for Valley Children's Hospital, explained usage and answered questions.

With this delicious CEU dinner, we learned about the huge impact that feeding content has for our NICU patients and we look forward to implementing this new insight in our unit.





























Welcome New Members By : Gilda Aum , RNC-NIC President Elect

Hello CCANN Members,

Thank you for selecting CCANN , a subchapter of the National Association of Neonatal Nurses in the Central Valley. Over the past few weeks our membership has significantly increased. Thank you for personally believing in CCANN and what the chapter can offer you in meeting your individual and professional needs.

The chapter has a couple more educational offerings before the year ends.We hope you find time to attend these learning opportunities.

October 12, 2024 Fall Hot Topics in Neonatal Care. This is open to all nurses and other professionals. This conference comes with a very affordable fee. A light breakfast and a warm hearty lunch is provided during the conference including a continuing educational unit. More importantly, you will have the opportunity to mingle with the other neonatal nurses in the Valley. You will also get the chance to meet with our product representatives as they demonstrate to the attendees their state of the art medical products.

November 7, 2024 A Mini Conference Dine and Learn with Fisher Paykel November 2024 A Mini Conference Dine and Learn with Cerave December 12, 2024 Christmas Gala Fort Washington Restaurant 1800 Hours

Mini conferences comes in with a free dinner from our loyal sponsors and a free CEU from CCANN. This event is only for members and respondez s ilvous plait is required promptly as space is limited to forty members from all over the NICU hospitals in Fresno all the way to Visalia NICU. It is a first text first in basis and we respectfully request that you register just your own self. Once again thank you for choosing CCANN as your go to professional organization and we look forward to meeting you in our coming conferences.

Gilda Aum



How to make a CCANN conference By: Gilda - Aum, RNC-NIC



The making of a CCANN conference involves careful planning, organization, and coordination among its officers and advisors to ensure its success.

The first step is to agree on a date when everyone is off work, to plan a meeting and meet privately. This usually happens around November or December. In the presence of the assembly, Kamela Loo, the founder of CCANN, starts by suggesting a specific theme for the conference. The advisors and the officers formulate and suggest subtopics around the main subject matter. Once everyone agrees with the topics presented, a keynote speaker is selected and invited to be the presenter.

The presenter then chooses a title for his topic, including his objectives. This will then be included in the conference leaflet for the benefit of the attendees.

Additionally, the date and the venue are chosen and locked in with the conference room coordinator. The date, time, and venue are then sent to our CCANN sponsors for them to add to their calendar. Moreover, we make sure that catering is reserved and audiovisual personnel is booked. The conference flyer, including the QR code, is then designed by Dee Morris, our education liaison officer. Sarah Gil advertised it among the members via CCANN Nurses.org, our official website. It is also emailed to all members by Sarah. Leslie Williams, who is in charge of communication, sends it out to our Facebook page and Instagram.

The sign-in sheet is then created by our graphic design coordinator, Savannah McIntyre. Linda Sepulveda, who is well loved with her humor and witty antics becomes our Master of Ceremonies.

We then go over our task lists and ask the members to volunteer in exchange for a service hour. Members manage the registration table, CCANN renewal, raffle ticket sale, t-shirt sale, evaluation, and certificate distribution.

The day before the conference, I go to the nursery and purchase our centerpieces and bring them to the venue, along with the evaluation forms, certificates, bags from sponsors, and a lot more.

Kamela and I set the place up with a little help from the custodian the night before the big event.

The day of the conference, the volunteers arrive early, including myself and Kamela, to greet our attendees, speakers, and sponsors while they set their tables. The whole team works like a well-oiled machine to bring the best topic and innovative experience to all our loyal attendees.

Attendees are given an ample opportunity to meet our vendors and their state of the art products.





Topic & Presenter







Sponsors



Announcement & release of flyers



A Tepanyaki Date with CCANN By : Coralee L. Agnas RNC-NIC, CCRN



CCANN members were up to a surprise treat at Sakura Chaya in Fresno- an outstanding interactive Japanese restaurant located at 690 East Nees Avenue last June 12, 2024 in exchange for another group activity.

The event was attended by Kamela Loo NNP with members : Gilda-Aum, Savage Wanda, Coralee Agnas and Ma.Cristin Padilla.

This teppanyaki restaurant delighted the members with their signature dishes of teriyaki chicken, salmon, steak and carefully selected vegetables.

The teppanyaki has an immersive experience that engaged all guest "senses" - while watching the skilled chef perform the culinary acrobatics, by flipping and tossing ingredients with an exact precision and flair. the sizzling sound and the aroma of teppan grilling fills the air as it tease the salivary glands and start building anticipation among hungry customers.

This unique culinary experience combines the art of grilling on a hot steel plate, blended with mouth watering collection of flavors and spices and a heavy load of showmanship and entertainment.

Thank you CCANN for a memory imprinting experience!





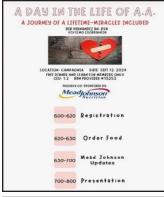
























Let's talk about ALCAPA By : Amy Boling , RNC-NIC Transport RN



CCANN's September dinner and learn, hosted by CCANN and Mead Johnson, welcomed Ross Nicholls and Deb Hernandez for the evening. Ross Nichols gave members insight into Enfamil Neuro Pro formula. This formula is available for both term and preterm babies. Enfamil Neuro Pro formula is unique in that it contains MFGM components from whey protein concentrate that mimic those in breast milk (Milk Fat Globule Membrane). MFGM components are an essential building block of the baby's brain. Enfamil NeuroPro EnfaCare Premature formula contains the MFGM components, extra protein, calcium, vitamins, and minerals. This premature formula has been proven to assist babies in catch-up growth and development during the first year (Clandinin et al., 2005).

Deb Hernandez, ECMO coordinator at Valley Children's Healthcare, presented on Anomalous Left Coronary Artery originating from the Pulmonary Artery, ALCAPA, a very rare cardiac defect, is one we rarely see in the NICU. This defect comprises only 0.24-0.46% of all congenital cardiac anomalies Al-Obaidi et al. (2024). This syndrome can also be referred to as Bland-White-Garland Syndrome. This usually is an isolated defect, but occasionally, other anomalies, such as an atrial septal defect, ventricular septal defect, and aortic coarctation, are found with diagnosis. ALCAPA usually isn't seen in infants until about 2-3 months of age (Blickenstaff et al., (2023).

Symptoms do not usually occur till after eight weeks of life. At birth, the pulmonary vascular resistance is high, meaning blood flow through the pulmonary artery is relatively low. Since the left coronary artery is supplied by the pulmonary artery, the blood flow to the heart muscle is also limited. As the pulmonary vasculature resistance decreases, and the blood flow to the left coronary increases, there is less blood flow to the left ventricle myocardium, leading to ischemia to the left ventricle (Pena et al., 2009). If ALCAPA is left undiagnosed or untreated, 90% of patients will die in the first year of life due to myocardial ischemia and infarction (Pena et al., 2009). Surgical correction of ALCAPA is done with a coronary button transfer. "In this procedure, the left coronary artery is reimplanted into the aorta with a button from the pulmonary artery wall. Coronary button transfer is the most commonly used procedure in newborns and is the most anatomic correction" (Hernandez, 2024).



Those in the 10% that live into their adult years have developed collateral circulation between the right and left coronary arteries to have survived for this length of time. These adults will not receive a diagnosis of ALPACA until they have experienced symptoms such as chest pain, which would lead to a cardiac workup. Think of the patients or adolescents who experience sudden cardiac death. These are patients who very well could have this defect.

CCANN members would like to thank CCANN and Mead Johnson for hosting both Ross Nichols and Deb Hernandez. We appreciate your willingness to share your knowledge with us! Dinner and learn is a fantastic opportunity for neonatal nurses from all over the valley to network, collaborate, and inspire change in our respective units.

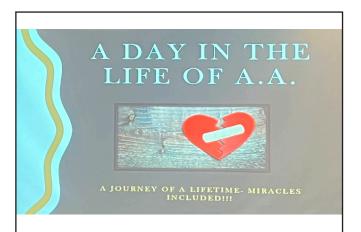
Al-Obaidi, M., Hecker, F., Walther, T., & Holubec, T. (2024). From asymptomatic adult patient to cardiopulmonary resuscitation - treatment of ALCAPA with total arterial myocardial revascularization and mitral valve repair. Journal of Cardiothoracic Surgery, 19(1), 369. https://doi.org/10.1186/s13019-024-02906-5 Blickenstaff, E. A., Smith, S. D., Cetta, F., Connolly, H. M., & Majdalany, D. S. (2023).

Anomalous left coronary artery from the pulmonary artery: How to diagnose and treat. Journal of Personalized Medicine, 13(11), 1561. http://doi.org/10.3390/ jpm13111561 Clandinin, M. T., Van Aerde, J. E., Merkel,K. L., et al. (2005). Growth and development of preterm infants fed infant formulas containing docosahexaenoic acid and arachidonic acid. Journal of Pediatrics, 146. 461-468. Hernandez, D. (2024). A day in the life of A. [PowerPoint].

Pena, E., Nguyen, E. T., Merchant, N., & Dennie, C. (2009). ALCAPA syndrome: Not just a pediatric disease. RadioGraphics, 29(2). https://doi.org/10.1148/ rg.292085059

































CCANN Fall conference 2024 By : Hannah Gissler VCH, NICU RN

Heart, compassion, and care: a topic very close to our hearts in the NICU and the subject at the center of CCANN's 2024 Fall Conference. We had a wonderful turn out, with more than 80 attendees!

The day kicked off with a sampling of the newest products from our vendors. Our sponsors included representatives from Kentec Medical, Atom Medical, Prolacta Bioscience, Cerave, Draeger, HB Fuller, Mead Johnson, and Lofty Images.

Manager of Genetic Counseling and Precision Medicine at Valley Children's, Jason Carmichael, MS, LCGC, began by talking to our group about the use of genetic screening, counseling, and therapy along the spectrum of care for our neonatal and pediatric patients in the Central Valley beginning in the preconception and prenatal period. Valley Children's Hospital was recently involved in Project Baby Bear, a state-wide initiative that provided rapid whole genome sequencing and has led to faster, improved diagnosis and management of patients with rare genetic conditions. This project showed improved results compared to focused diagnostic testing historically used in symptomatic patients. He dove deeper into the field of Precision Medicine and genetic counseling and their collaboration with the care team relating to genetic testing strategies and the optimization of electronic resources for information storage and sharing.

Dr. Chokshi, one of our Neonatologists, and Kamela Loo, CCANN president and Neonatal Nurse Practitioner, led an interactive case study review that tested our group's clinical reasoning. They reviewed many topics including management of NEC with pneumoperitoneum, cephalohematoma, HIE, thrombocytopenia and NAIT, omphalitis, genetic screening, Hirschsprung disease, and Tuberous Sclerosis Complex.

Rachel Caro, one of Valley Children's Hospital's fantastic wound and ostomy nurses, presented on her speciality and its application to our NICU patients. She started with a review of skin anatomy, function, and regeneration, highlighting differences seen in newborn skin. Our patients have special considerations for care because their skin is thinner, more permeable to topical exposures, and represents a greater surface area compared to body size leading to higher water and heat loss. NICU patients are at a particularly high risk for adhesive-related injury, extravasation, and diaper dermatitis. She emphasized doing our part to prevent and manage skin injuries with appropriate assessment, rotation of medical devices, frequent diaper changes, and early intervention and referral for skin concerns. She rounded her presentation out with an overview of ostomy care. After lunch, the conference was continued with a presentation by pediatric gastroenterologist, Dr. Archana Lingannan, on GERD in preterm infants. Gastroesohageal reflux is a common, normal condition that involves backflow of stomach contents into the esophagus. This can be seen in increased frequency in the newborn related to diet and anatomy. This condition is considered part of Gastroesophageal Reflux Disease when it is complicated by inflammation, erosions, or other serious symptoms. Many medications historically used in adult patients to manage reflux, such as famotidine, lansoprazole, and metoclopramide, have little evidence to support their use in neonates and some have been shown to increase risks in preterm infants related to alteration in the infants' natural immune barriers and gastric function. She recommends prioritizing Safe-Sleep strategies in infants and following conservative treatment options when possible.

Neonatal nurse practitioner and representative from Prolacta and HB Fuller, Amy Paradis, ended the presentations by speaking on the use of cyanoacrylate tissue adhesives for both central and peripheral intravenous access to promote line maintenance and infection risk mitigation. This new innovation provides improvement in hemostasis, catheter securement, dressing adherence, CLABSI reduction, and pathogen destruction. Future NICU patients will likely benefit from these advancements in adhesive technology.

Our CCANN conference this fall did not disappoint! What a wonderful way to spend a Saturday with friends and colleagues! Thank you to all of our wonderful sponsors and presenters for making this fall conference one to remember!



... Let our lives be full of "thanks" and "giving" ... - Marcel Proust

















