

Human Milk Insights

February 2021

The Human Milk Insights newsletter presents the latest breastfeeding topics and clinical practice solutions, addresses coding issues challenging the lactation community, features a lactation service, and announces upcoming webinars and conferences.

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*From mother to baby
with love*

FEATURED STORIES THIS MONTH

NEWS YOU CAN USE

- Human Milk and NICU
- Human Milk and COVID-19

HUMAN MILK EDUCATION

- Human Milk Monthly Webinar Series
- Five Part Global Webinar Series: Breastfeeding Initiation in Crisis: The Aftereffects of COVID-19
- Dedicated Webpage for Healthcare Professionals on the Global Impact of COVID-19 on Breastfeeding
- Neonatal Perspectives
- Spotlight on Practice – We Want to Hear From You!
- New Medela YouTube Channel

CLINICAL PEARLS IN LACTATION

- Ankyloglossia Session at the 2020 AAP Conference

TOOLS YOU CAN USE

- Collecting Milk for Use in COVID-19 Research

SPOTLIGHT ON PRACTICE

- April Grady, BSN, RN, IBCLC, PHN

NEWS YOU CAN USE

HUMAN MILK AND NICU

Indicators of Secretory Activation in Mothers of Preterm Very Low Birth Weight Infants

Leslie A. Parker, PhD.../December 2020
Examination of factors influencing secretory activation, which is often delayed in mothers of very low birth weight infants.

<https://journals.sagepub.com/doi/10.1177/0890334420980424>

Factors Associated with Breastfeeding Very Low Birth Weight Infants at Neonatal Intensive Care Unit Discharge: A Single-Center Brazilian Experience

Mariana González de Oliveira, Desirée de Freitas Valle Volkmer.../December 2020
Factors associated with breastfeeding rates at infant discharge from the NICU.

<https://doi.org/10.1177%2F0890334420981929>

HUMAN MILK AND COVID-19

Shared Decision-Making for Infant Feeding and Care During the Coronavirus Disease 2019 Pandemic

Laura N. Haiek.../January 2021
Highlights in-depth decision making process with rationale for provision of evidence-based information to parents making infant feeding decisions during the COVID-19 pandemic.

<https://onlinelibrary.wiley.com/doi/10.1111/mcn.13129>

WHO: The World Health Organization

Released a document including specific recommendations for use of the Pfizer-BioNTech COVID-19 vaccine, BNT162b2

for lactating and pregnant women. January 2021

https://www.who.int/publications/i/item/WHO-2019-nCoV-vaccines-SAGE_recommendation-BNT162b2-2021.1

AWHPNN/NAAN/NPA: The Association of Women's Health, Obstetric and Neonatal Nurses, National Association of Neonatal Nurses, and National Perinatal Association

Released a statement of support of shared decision-making for family presence in the NICU. January 2021

https://nann.org/uploads/About/PositionPDFS/Consensus_Statement_AWHONN_NANN_NPA_final.pdf

USBC: The United States Breastfeeding Committee

Updated their webpage including resources regarding COVID-19 and Infant Feeding Practices

<http://www.usbreastfeeding.org/p/cm/ld/fid=33?eType=EmailBlastContent&eld=78a4327c-a226-4024-bee2-dc0226be34ab>

ABM: The Academy of Breastfeeding Medicine

Released a statement highlighting the multiple considerations regarding vaccination against COVID-19 for lactating mothers. Alison Stuebe/January 2021

<https://www.liebertpub.com/doi/10.1089/bfm.2020.29172.abm>

HUMAN MILK EDUCATION

Breast milk initiation and breastfeeding has changed drastically over the last year due to the effects of COVID-19 on our hospital systems, our healthcare professionals and

breastfeeding families. Join us for a series of thought leadership-based webinars designed to raise awareness of COVID-19 and breastfeeding and the impact of the coronavirus on breast milk initiation. Each month, we'll learn about areas of breastfeeding research from leading human milk researchers and clinicians to better understand these dynamic changes, current research and findings, and where we go from here. This series will kick off on Thursday, February 4th. [Diane Spatz, PhD, RN-BC, FAAN](#) and [Lars Bode, PhD](#) will present their topic [Protecting Human Milk and Breastfeeding in a COVID-19 World & Beyond](#). Complimentary registration is now open! For more information or to register, visit www.MedelaEducation.com.

On Wednesday, February 17th, [Jennifer Payne, MD](#) will present her topic [Maternal Mental Health: What We Know and Where Do We Go From Here?](#) Complimentary registration is now open! For more information or to register, visit www.MedelaEducation.com.

On Wednesday, March 17th, [Kelli D. Kelley](#) will present her topic [The Psychosocial Impact of COVID-19 on NICU Families](#). Complimentary registration is now open! For more information or to register, visit www.MedelaEducation.com

Our 2021 webinar schedule is available! Click [here](#) to download a copy.

Neonatal Perspectives

This is a blog for NICU professionals that features clinical information from neonatal consultants, as well as industry news and popular topics. Click [here](#) to read the latest blogs.

Spotlight on Practice

Our column titled Spotlight on Practice is for lactation practitioners and facilities who wish to acknowledge the work of others. We invite you to submit suggested practitioners or facilities you would like to spotlight. If you have a suggestion, email education@medela.com.

Medela YouTube Channel

Medela is happy to announce our new YouTube channel for [Lactation Professionals!](#) Professionals can now access Medela in-servicing and instructional videos on YouTube in a format tailored specifically for the healthcare professional. Select patient education, including the newly released breastfeeding series with lactation consultant and midwife, Katie James, IBCLC, has also been included. Each video includes a short description and relevant links to the product page on medela.us. <https://www.youtube.com/channel/UCONXFpEp4zbKNZEQHroMHTQ/featured>

CLINICAL PEARLS IN LACTATION

This column is for lactation practitioners to share clinical challenges and successes, observations and pearls with colleagues. To share a clinical pearl, [submit it here](#). If your submission is selected for publication in a future issue of Human Milk Insights, you will receive a \$25.00 VISA gift card.

Ankyloglossia Session at the 2020 AAP Conference

About 4-11% of infants are born affected with a tight lingual frenulum. Difficulties with breastfeeding can occur when movement of the infant's tongue or upper lip is restricted. According to the AAP Textbook of Pediatric Care, ankyloglossia is defined as, "the presence of a short or tight lingual frenulum that can restrict proper tongue extension and movement, hindering proper breastfeeding abilities in the infant." Severe maternal pain, nipple tissue damage, and repeated bouts of mastitis can occur in the mother, while ineffective milk transfer - resulting poor weight gain and aerophagia - can occur in the infant.

Some pediatricians have voiced concerns that, in recent years, ankyloglossia (tongue-ties), lip ties, and buccal ties have been overused diagnoses when mothers and babies experience breastfeeding difficulties. Other concerns are related to the overuse of frenotomies and complications that may arise.

Part of the concern is that, as more and more families are no longer turning to their physicians for information but are instead using the internet, social media groups have become a much larger influence. Some of the information found online discourages mothers from going to their pediatricians for help and support for breastfeeding problems. Instead, surgical correction may be recommended for these conditions before a comprehensive breastfeeding assessment by a professional has been completed. A feeding assessment can help distinguish between a simple anatomic finding and a functional impairment. It can guide treatment options or determine whether surgical correction is even needed.

At the 2020 AAP Virtual National Conference and Exhibition this summer, Anne K Meyer, MD, FACS, FAAP, an otolaryngologist and head and neck surgeon at the UC SF Benioff Children's Hospital, led a session on "Ankyloglossia and Other Ties: What is the Evidence?" to guide pediatricians to evidence they can use to decide if surgical intervention is necessary. According to Dr. Meyer, there is a lack of a standardized diagnosis or classification of ankyloglossia. She states that anterior ankyloglossia, also called classis ankyloglossia, is the only true type of tongue tie that exists. She feels that because there is no validated assessment tool or randomized controlled trials to support frenotomy, a posterior ankyloglossia is an inaccurate term. She also mentioned that there is a dearth of evidence to attribute breastfeeding problems to upper lip ties or buccal ties.

To assist pediatricians in determining a feeding problem, Dr Meyer suggested using the Bristol Tongue Assessment Tool (<https://fn.bmj.com/content/100/4/F344.full>) and mentioned that she also uses the LATCH mnemonic to assess tongue tie: Latch, Audible swallowing, Type of nipple, Comfort and Hold. She recommended observing how the mother holds her infant during a breastfeeding session to see if a shallow latch could be causing nipple soreness. Changing the hold to another nursing position can improve the latch. She also discussed the importance of watching the infant's mouth, tongue, lips, mandible, palate, head, and neck, and auscultating the airway as well as the heart and lungs.

Although she concedes that current research supports frenotomy for classic ankyloglossia causing breastfeeding problems, Dr. Meyer believes that new mothers may be at risk for overtreatment when it comes to frenotomies. She states, "By and far, the biggest challenge that I see . . . is whether the family has good access to adequate lactation and maternal support." She advocates that mothers get more lactation support rather than more frenotomies.

Korioth, T. Unraveling breastfeeding problems related to ankyloglossia (Jan 2020) AAP News.
<https://www.aappublications.org/news/2021/01/01/nce2020-tonguetie010121>

TOOLS YOU CAN USE

In January's issue of *Breastfeeding Medicine*, Michelle McGuire and her co-authors discuss the importance of researchers using standardized "Best Practices" when collecting, handling, storing, and analyzing milk samples for COVID-19 and other pandemic research. This is critical because, while deciding whether or not a particular pathogen is transmitted through breast milk, in the interim mothers may be instructed not to breastfeed until science has shown that breastfeeding is safe. It is also essential that researchers determine whether a pathogen is transferred into milk through the mammary gland itself, or if exogenous contamination of the milk occurred through respiratory droplets, skin, milk containers or by the mother and infant being in close contact.

There are many factors for researchers to consider when designing protocols to study human milk. Variations in milk composition are dependent on the time of day, time since the last feeding, time passed since birth, which breast was used, storage temperature, the type of storage container and other variants. It's important that these key elements be shared and reported in published materials so that results can be compared from one study to another.

The authors acknowledge that there is not much known about the "state of the science" for many of the factors that may impact the concentration or stability of some of the milk components, and that additional research is needed to address these knowledge gaps. This article sheds light on some of the studied components when evaluating transmission of a pathogen in milk, and whether various factors are known to impact their concentration. Table 2 illustrates how the viral DNA/RNA, bacterial DNA, microbial viability, antibodies, anti-inflammatory factors and immune cells can all be affected by conditions such as whether hand expression was used versus a breast pump, whether the breast was cleaned (or not), and whether the milk sample was from foremilk, hindmilk or a composite expression was used.

Ethical considerations of the use of human milk in research is also mentioned. Not only should all procedures be approved by institutional or national boards, but participants' identities and rights should be protected. Mothers should give informed consent, understand how their milk will be used in the study and be reassured that the samples will not be used for other purposes or sold. In addition, researchers are cautioned to take special care if a mother's milk supply is limited or if her infant's health is compromised so the volume of milk available to the infant is not jeopardized. Safety concerns and use of protective personal equipment is also addressed in the article.

Research on human milk is essential during the time of COVID-19 and when other pandemics arise. This research is necessary so the medical community can accurately assess the benefits of breastfeeding versus the risks during this time. However, there is scarce evidence regarding the presence or absence of pathogens in human milk, the time when they may be present, viral load and viability, what antibodies exist and how they function, all of which makes an evaluation extremely difficult. By standardizing strict collection and storage protocols and by implementing and sharing these protocols in published materials, researchers can hopefully avoid inconsistent results and can assist in giving timely public health guidance.

Michelle K McGuire & Antti Seppo, et.al (2021) *Breastfeeding Medicine*. Best Practices for Human Milk Collection for COVID-19 Research. 29-30. <http://doi.org/10.1089/bfm.2020.0296>

SPOTLIGHT ON PRACTICE

This column is for lactation practitioners and facilities who wish to acknowledge the work of others. We invite you to submit suggested practitioners or facilities you would like to spotlight. If you have a suggestion, email education@medela.com.

*This month we are spotlighting April Grady BSN, RN, IBCLC, PHN,
Scotts Valley, CA*

April Grady is a passionate lactation professional working as the NICU lactation coordinator for Santa Clara Valley Medical Center (SCVMC). For over seven years, April has worked to assist families of vulnerable infants in meeting their personal breastfeeding goals.

April grew up in Boulder Creek, often caring for her younger siblings in the majestic Santa Cruz mountains. Surrounded by national parks, mountain trails and wildlife, April gravitated to the 4-H organization where she learned to care for area farm animals. Initially wanting to become a veterinarian, severe allergies caused her to investigate another option to study science.

The compassion, support, and education April witnessed from the nursing staff who provided care to her and her infant son after an emergency Cesarean delivery was a strong impetus for April to pursue a career in nursing.

Before entering college to study nursing and while raising her young family, April practiced as a birth doula and fell in love with assisting families in meeting their birth plans and breastfeeding goals. After graduating from San Jose State University, April was hired as a graduate nurse in the NICU at SCVMC.

As a NICU clinician, April gravitated toward assisting mothers pumping milk and breastfeeding their NICU babies. April pursued the education needed to become an IBCLC and was hired as the permanent lactation consultant for the NICU. In this role, April spearheaded SCVMC in achieving the BFHI designation, helped establish the NICU human milk prep room, and developed solid relationships with the hospital's community centers and ambulatory health clinics to meet the diverse needs of the community. SCVMC serves a community of culturally diverse families, having one of the highest immigrant populations in the US. The medical center has developed several breastfeeding support groups and programs to meet the needs of their community.

Like so many other inpatient settings, SCVMC has witnessed system-wide challenges with the onset of COVID-19, causing significant stressors for NICU families. April has seen many parents experience increased anxiety about pumping, breastfeeding, visitation regulations, and their infants' hospitalization. Her goal is to support families with their personal feeding goals, regardless of what that looks like. A lot of teaching and support is needed but April acknowledges that NICU families appear to be more committed to providing human milk for their infants despite the challenges they experience. Family members have even met April in the hospital parking lot to drop off expressed milk for their infants when visitation rules have limited NICU visits for COVID-positive families. While in-person lactation support groups no longer exist due to the pandemic, virtual assistance is available to families throughout the community. Several SCVMC ambulatory clinics are currently managing in-person consultations post-hospital discharge. April recognizes that there are many passionate individuals in the community who

are working to continue lactation support through the pandemic. She works in whatever way possible to support these efforts and to ensure families know of the lactation resources that are available to them.

April met her husband Ben in high school. Together they have two sons; their oldest is currently living and working in southern California. FaceTime and family Zoom calls have become the standard way of keeping in touch. Their younger son, a senior in high school, has been distance learning since last March, relying on Zoom calls to socialize with friends. He is excelling in an International Baccalaureate Diploma program. April is slowly returning to her favorite outdoor activity, hiking, after multiple foot surgeries and rigorous physical therapy. She is an avid collector of vintage Pyrex, has discovered the therapeutic value of coloring to 'de-stress', and is a *passionate* follower of the artist, Prince. She has even dyed her hair purple, her favorite color. April cherishes family time and longs for when being together will no longer be restricted by the pandemic.

April has committed herself to supporting breastfeeding families in every aspect of her life. Her passion for assisting breastfeeding families is well recognized by the grateful staff of Santa Clara Valley Medical Center and the Santa Clara community. The many families April has touched are grateful for her professional lactation skills, her strong passion to advocate for them, and her commitment to helping them meet their breastfeeding goals.