



Lauren Maggi, February 7, 2023

Evaluation and management of Low Milk Supply (LMS)

1. Definition or Key Clinical Information: LMS occurs in 10%-15% of lactating parents, but may be increasing due to increasing rates of obesity and diabetes (Jin et al., 2024). LMS may be caused by pre-glandular, glandular, and postglandular causes (Farah et al., 2021). Other extrinsic causes may be the reason for LMS (Jin et al., 2024). Weighted feeds, hormone panels, evaluation of malnutrition, physical exams, and screening assessments can help find the cause of LMS or other underlying issues.

2. Assessment

i. Risk Factors

- PPH that may have led to Sheehan's Syndrome (Farah et al., 2021)
- Smoking, drug, or alcohol use (Morbacher, 2020)
- Past breast surgery or nipple piercings (Jin et al., 2024)
- Past exposure to Endocrine-Disrupting Chemicals (EDCs) (Jin et al., 2024)
- Heavy exposure to BPAs in pregnancy (Jin et al., 2024)
- Neonate issues such as ankyloglossia, cleft lip/palate, neurological complications (Jin et al., 2024)
- Breast hypoplasia (Jin et al., 2024)
- PCOS (Jin et al., 2024)
- Obesity (Jin et al., 2024)
- Diabetes I or II (Jin et al., 2024)
- Preterm Birth (Farah et al., 2021)
- Breast implants, reduction, or other breast surgery (Jin et al., 2024; Schiff et al., 2014)
- Exposure to persistent organic pollutants (POPs) in childhood and puberty (Jin et al., 2024)

ii. Subjective Symptoms

- Low milk expression while pumping, mammary tissue feels soft inbetween feeds, no milk leakage, fussy baby while nursing, after nursing, or inbetween feeds, frequent night wakings, baby takes a bottle after nursing, and/or not feeling a let-down (Morbacher, 2020)

iii. Objective Signs

- Weighted feed showing low intake of milk
- Breast exam for breast hypoplasia, if augmentation has been done, determine if hypoplasia was present prior to surgery (Schiff et al., 2014)
- Exam of the infant to determine if ankyloglossia is present or a lip tie

iv. Clinical Impressions

- Hormone testing
- Visual signs of breast hypoplasia

MCU Practice Guideline Template

v. Winter 2024

-Visual appearance of ankyloglossia or lip tie

v. Clinical Test Considerations

-Labs drawn to determine if there is high estradiol (E2), high progesterone, high testosterone, abnormal thyroid hormones, abnormal insulin levels, b-hCG levels to determine if there is a retained placenta (Jin et al., 2024; Morbacher, 2020)

-Screening assessments may include the Latch Breastfeeding Assessment Tool, the Hill and Humenick (H&H) Scale, and the Breastfeeding Self-Efficacy Scale-Short Form (BSES-SF) (Registered Nurses Association of Ontario [RNAO], 2018).

-Neurological testing for infant if indicated, referral to a pediatric neurologist which may be needed from their pediatrician (Jin et al., 2024)

-Referral to an IBCLC or pediatric dentist for suspected ankyloglossia or lip tie evaluation and/or revision (Morbacher, 2020)

-Screening of drug and supplement intake (Farah et al., 2021; Morbacher 2020)

vi. Differential Diagnosis (include citations used to inform this section here)

-Thyroid disease/hypothyroid (Morbacher, 2020)

-Diabetes Melitus (Farah et al., 2021)

-PCOS (Farah et al., 2021)

-Retained placenta (Farah et al., 2021)

-Gestational ovarian theca lutein cysts (Farah et al., 2021)

-Sheehan's Syndrome (Farah et al., 2021)

-Malnutrition (Morbacher, 2020)

3. Management plan

i. Therapeutic measures to consider within the CPM scope

-Education on the effects of supplementation on breast/chestfeeding (Jin et al., 2024)

-Breast compression while nursing/pumping (Morbacher, 2020)

-“Power Pumping,” “Cluster Pumping,” or the “Pump Like Crazy” methods (Morbacher, 2020)

-Galactogogues (fenugreek, fennel, milk thistle, blessed thistle, and goat's rue) (Morbacher, 2020)

-Kinesio tape application to the breast (Morbacher, 2020)

ii. Therapeutic measures commonly used by other practitioners

-Acupuncture, accupressior, or chiropractic care (Morbacher, 2020)

-Metoclopramide (Reglan) (Morbacher, 2020)

iii. Ongoing care

Continued weighted feeds and check-ins every 3-5 days or PRN

iv. Indications for Consult, Collaboration, or Referral

Abnormal lab results, suspected ankyloglossia/lip tie, suspected neurological issue in the infant

v. Client and family education

Education materials may include the handouts: “Galactogogues: Increasing Your Supply”, “How Medications and Supplements Affect Milk Supply,” and “A Good Start to Breast/Chestfeeding.”

References

- Farah, E., Barger, M. K., Klima, C., Rossman, B., & Hershberger, P. (2021). Impaired lactation: Review of delayed lactogenesis and insufficient lactation. *Journal of Midwifery & Women's Health*, 66(5), 631–640. <https://doi.org/10.1111/jmwh.13274>
- Jin, X., Perrella, S. L., Lai, C., Taylor, N. L., & Geddes, D. T. (2024). Causes of low milk supply: The roles of estrogens, progesterone, and related external factors. *Advances in Nutrition*, 15(1), 100129. <https://doi.org/10.1016/j.advnut.2023.10.002>
- Mohrbacher, N. (2020). *Breastfeeding answers: A guide for helping families* (2nd ed.). Nancy Mohrbacher Solutions, Inc.
- Registered Nurses Association of Ontario. (2018). *Breastfeeding - Promoting and supporting the initiation, exclusivity, and continuation of breastfeeding for newborns, infants, and young children* [PDF]. <https://bpgmobile.rnao.ca/sites/default/files/Hill%20and%20Humenick%20Scale%2C%20LATCH%20assessment%20tool.pdf>
- Schiff, M., Algert, C. S., Ampt, A., Sywak, M. S., & Roberts, C. L. (2014). The impact of cosmetic breast implants on breastfeeding: A systematic review and meta-analysis. *International Breastfeeding Journal*, 9(1). <https://doi.org/10.1186/1746-4358-9-17>