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I do not intend to discuss an unapproved/investigative use of a commercial product/device in my presentation

I receive honorarium for my presentations and workshops.

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Objectives

- Review the birth and lactation practices used by different cultures to help resolving acute breast pain.
- Identify traditional postpartum support networks in diverse cultures.
- Discuss current research findings on the role of manual techniques in managing maternal acute breast pain (e.g., engorgement, plugged ducts and mastitis) as well as managing milk supply (low or over).
- Discuss conditions associated with breast swelling and inflammation such as engorgement, plugged ducts, mastitis and oversupply.
- Learn how hand expression can help to increase milk production
- Demonstrate manual techniques for treatment of plugged ducts, mastitis and oversupply and explain how to teach these techniques to breastfeeding parents.

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What are you hoping to gain from this workshop?

- I am hoping to gain more in-depth knowledge of the breastfeeding world from someone who understands clinical work/hospital environment.
- I am open to learning
- I am hoping to develop more hands-on clinical skills in helping patients find relief from clogged ducts, mastitis, and breast inflammation
- I am a LC in a private practice that just started, I would like to gain all the knowledge possible to be able to help breastfeeding dyads overcome the most common challenges like engorgement, increase milk supply, plug ducts, etc.
- Advanced skills and techniques. It is a little hard to learn new and advanced method in the current conferences and online workshops after 20+ years.
- Increase my knowledge & skills to help mothers care for their breasts and help them achieve their BF goals

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Massage in different cultures

- Oketani Massage
- Gua-Sha Therapy
- Aruagan Massage
- Thai Breast Massage
- Russian Breast Massage

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“Gua Sha is a Chinese muscle scraping therapy applied to the breast that has been traditionally used to treat pain based on the Chinese principles of the 12 meridians.”

A randomized controlled trial (N = 54) assessed the effect of Gua Sha on a subjective scale that measured pain, engorgement, and discomfort on a visual analogue scale.

Participants were randomized to two groups: hot packs/massage or Gua Sha therapy.

Gua Sha reduced reported pain and discomfort more than did hot packs and massage at 5 and 30 minutes following the intervention (P .001).”

Clifton P. Thornton, Caring for Women Experiencing Breast Engorgement: A Case Report

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Effectiveness of breast massage in the treatment of women with breastfeeding problems: a systematic review protocol

Loretta Anderson, Kathryn Kynoch, Sue Kildea

“Breast massage is widely used throughout the world as a treatment of breastfeeding problems. Breast massage has been used with success in both the support of breastfeeding women and the treatment of common breastfeeding difficulties.”

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Comparison of the Effect of Kinesio Taping and Manual Lymphatic Drainage on Breast Engorgement in Postpartum Women: A Randomized-Controlled Trial

October, 2020, Breastfeeding Medicine 16 (1) Hanife Dogan, Semra Eroglu, Turkan Akbayrak.

Objectives: To investigate the effect of Kinesio taping (KT) and manual lymphatic drainage (MLD) on pain severity, breast engorgement, and milk volume in postpartum women.

Materials and Methods: 67 postpartum women who had breast engorgement and randomly assigned them to the KT, MLD, and control group. In the KT group, taping plus breast care was performed, MLD plus breast care was performed in the MLD group, and in the control group, only routine breast care was given for 10 days. Pain, breast engorgement, body temperature, and milk volume were measured. Examinations were repeated on days 1, 4, and 10.

Conclusions: MLD relieved breast pain and firmness more and increased milk volume in postpartum women compared with the KT and control groups. MLD can be recommended to postnatal mothers to better manage breast engorgement.”

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Mothers Value and Utilize Early Outpatient Education on Breast Massage and Hand Expression in their Self- Management of Engorgement.

Breastfeeding Medicine 2016 epub. Witt, Bolman and Kredit

Post-hospital newborn visit
Instructed on TBML massage and hand expression (demonstration, handout, video link)
Assisted in techniques as needed to latch the baby in office

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Study design:

76 mothers enrolled at newborn visit.
 Received email survey at 2 days, 2 weeks and 12 weeks with questions about:
 Home treatments used prior to visit
 Course of engorgement
 Was the instruction on hand expression and breast massage in the office helpful?

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Sample Characteristics

Sample Characteristics	Total n=73	Sample Characteristics	
Maternal Age (years)	31 (23-42)	Vaginal Delivery	59 (81%)
		Epidural	51(73%)
Private Insurance	66 (90%)	IV fluids during Delivery	68 (93%)
College grad	62 (85%)	BF goal > 12 months	43(60%)
Caucasian	60(81%)	Taught hand expression previously	45 (62%)
		Given community resources	59 (83%)
Returning to work	56 (77%)		
Multiparous	35(48%)		

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What have you tried for relieving engorgement?

	Before 1 st visit	2 days	sig
Nothing	8 (11%)	7(10%)	.765
Feeding the baby more frequently	13(17%)	22 (32%)	0.040
RPS before latching the baby	2(3%)	12(17%)	0.001
Hand Expressing	10(13%)	16(23%)	0.135
Pumping	16(21%)	21(30%)	0.109
Massage	29(39%)	35(51%)	0.145
Cool compresses	7(9%)	14(20%)	0.018
Warm compresses/Warm shower	13(17%)	12(17%)	1.00
Cabbage Leaves	0	3(4%)	0.083
Ibuprofen	6(8%)	3(19%)	0.070

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How do you massage?

	Before 1 st visit	2 days	sig
Toward the nipple/areola	19 (25%)	18 (23%)	0.829
Toward armpit and away from nipple	1(1%)	17 (22%)	0.000
Massage in multiple directions	11(14%)	20 (26%)	0.007
Fingertips to massage	18 (23%)	29 (38%)	0.008
Used my whole hand to massage	9 (12%)	17 (22%)	0.031
Used oil	0	3 (4%)	0.083
It hurt	10(13%)	6(8%)	0.208
It did not hurt	5(7%)	20(26%)	<0.001

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Mothers' Impressions

When asked in the 12-week survey to look back at the office visit, 96% of mothers reported that the instruction on hand expression and massage was helpful.

Mothers also qualitatively reported what they found helpful about the office instruction (Table 3). Mothers appreciated learning specific massage techniques, seeing the techniques modeled, discovering how massage could provide pain relief, feeling supported by their providers, and becoming empowered to self-manage their symptoms.

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Responses

- “Taught me what to do when I was in pain. And it worked!”
- “I can successfully massage and express milk independently. I know the tools necessary to fix problems without seeing the doctor.”
- “The general support and knowing that I could relieve my own pain from the engorgement.”
- “Obviously it’s easier to understand when you’re given a demonstration! I really appreciated the lactation consultant’s visual description of the breast.”
- “I had heard to massage the breast vigorously with lots of pressure. I learned not to do that and to treat the breast very gently and delicately.”

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Therapeutic Breast Massage in Lactation: For the treatment of Engorgement, Plugged Ducts and Mastitis

Prospective, descriptive

Population:

- Cases (n= 42): Breastfeeding women with acute breast defined as pain <1 week (i.e. mastitis, engorgement, or plugged ducts)

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Treatment Response: Pain Level**

	Pre-Massage (n = 42)	Post-Massage (n=42)	Mean Change (SD)	P-value*
Maternal self-report past 24 hrs				
Breast pain level	6.4(2.5)	2.8(1.5)	3.6(2.2)	0*
Nipple pain level	4.6(3.9)	2.8(2.4)	1.8(3.2)	0.001*
Initial Physical Exam				
Breast tenderness	7.14 (2.7)	3.26 (1.8)	3.9 (2.4)	0*
Nipple tenderness	5.2(3.7)	3.1(2.4)	2.1 (3)	0*

**Mean (SD)

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Treatment Response: Engorgement

	Pre (n= 30)	Post (n= 30)	P-value*
Periareolar Swelling (n=15)	14 (93%)	1(7%)	0
Overall Engorgement (Both Breasts)	5.31(1.2)	3.48(1.2)	0*
Engorgement Severity**			
NONE	0 (0%)	1(2%)	1
soft, no change	0 (0%)	1(2%)	1
slight change	0 (0%)	3(10%)	0.237
firm, non-tender	2(7%)	5(17%)	0.424
firm, beginning tenderness	3(18%)	14(47%)	0.002
firm, tender	11(37%)	5(17%)	0.08
very firm and very tender	16(53%)	0 (0%)	0

*Mean change in engorgement level = 1.82 (p<0.001)

** Humenick JHL 1994

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Treatment Response: Plugged Duct

Plugged ducts	pre (n= 28)	post (n= 28)	P-value*
Overall Plugged duct level	2.29(1)	0.5(.3)	0*
Plugged Duct Severity			
Resolved/gone	0	16 (57%)	0
1-3 cm	9 (32%)	10 (36%)	0.778
> 3 but < 5 cm	5 (18%)	2 (7%)	0.422
> 5 cm	11(39%)	0 (0%)	0
Mean change in plugged duct severity = 1.82 SD +/- 1.1 (p<0.001)			
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Was the Massage Treatment Helpful?

Not Helpful	0%
Somewhat Helpful	2 (5%)
Helpful	10(23%)
Very Helpful	25 (58%)
<p>“Pain relief was amazing” “Massage and resolving mastitis helped me meet my breastfeeding goal of exclusive breastfeeding. I would not have succeeded without this help”</p>	
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Academy of Breastfeeding Medicine Clinical Protocol #36: The Mastitis Spectrum, Revised 2022

- *Avoid deep massage of the lactating breast. Deep massage causes increased inflammation, tissue edema, and microvascular injury.
- *Avoid electric toothbrushes and other commercial vibrating or massaging devices.
- *A systematic review concluded that although breast massage may reduce pain, it should not be recommended as standard of care because it requires extensive training to master atraumatic approach.
- *The most successful technique approximates manual lymphatic drainage with light sweeping of the skin rather than deep tissue massage
- *Silicone breast pumps filled with Epsom salt can macerate skin and further contribute to localized hyperemia and edema, and should be avoided.

ABM Engagement Protocol #20

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Academy of Breastfeeding Medicine Clinical Protocol #36: The Mastitis Spectrum, Revised 2022

****Avoid deep massage of the lactating breast. Deep massage causes increased inflammation, tissue edema, and microvascular injury.**

***Avoid electric toothbrushes and other commercial vibrating or massaging devices.**

***Silicone breast pumps filled with Epsom salt can macerate skin and further contribute to localized hyperemia and edema and should be avoided."**

ABM Engagement Protocol #22

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****A systematic review concluded that although breast massage may reduce pain, it should not be recommended as standard of care because it requires extensive training to master atraumatic approach.**

***The most successful technique approximates manual lymphatic drainage with light sweeping of the skin rather than deep tissue massage."**

ABM Engagement Protocol #22

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JAMA Insights, Women Health Risk Factors, Symptoms, and Treatment of Lactational Mastitis

Adetola F. Louis-Jacques, MD; Margarita Berwick, MD; Katrina B. Mitchell, MD

"Breast massage is a commonly recommended supplement to mastitis treatment; however, the efficacy and generalizability of this method are limited by quality of evidence and by heterogeneity of massage techniques, study designs, and geographic settings of studies.

Gentle breast handling should be exercised to avoid tissue trauma, edema, and inflammation that may be associated with deep massage; examples include **therapeutic breast massage in lactation and lymphatic breast drainage. **Therapeutic breast massage in lactation is a combination of gentle massage from the areola toward the axillae alternated with hand expression of milk.** Lymphatic drainage involves a light brushing motion to lift the skin off underlying lymphatics and promote decongestion of fluid."**

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Impact of Hand Expression and Hands on Pumping on Milk Supply

- Prospective Observational Cohort Study
- 67 mothers of preterm infants <31 wks GA, < 1500gm
- Recorded output for 8 weeks
- Began pumping within first 6 hrs postpartum
- Double Pumping X 8 a day for 15 min

Hypothesis: the use of manual techniques (hand expression of colostrum and hands on pumping (HOP) of mature milk) promote establishing and maintaining sufficient milk supply.

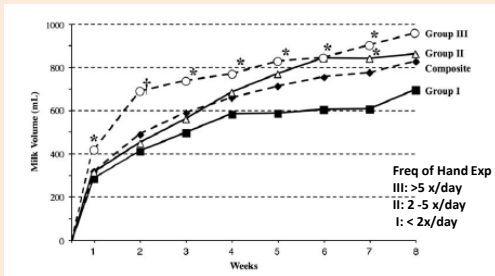
Morton et al, Journal of Perinatology 2009

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Hand Expression of Colostrum

Frequency of hand expression in first three days impacts milk volume



* p < 0.005 compared to group I and p < 0.023 compared to group II

Morton et al, Journal of Perinatology 2009

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Prenatal Education

Antenatal hand expression

Positioning and latching

Anticipatory guidance on engorgement

What to do if baby is not latching?

Early Postpartum Support is Important!!!!

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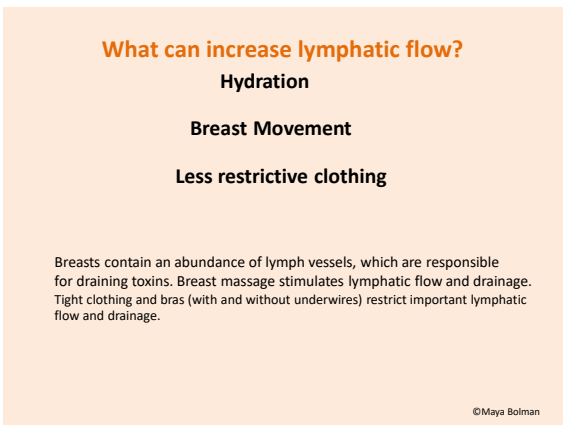
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Therapeutic Breast Massage in Lactation

TBML

Therapeutic breast massage in lactation is a combination of two equally important parts:

- 1) Gentle massage from the areola toward the axillae
Alternated with
- 2) Hand expression of milk from affected area.

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Hand Expression is NOT One Size Fits All Technique!!!

Dreamstime.com

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BREASTKINDNESS

- Teach parents to touch with love and compassion
- Touch helps to calm nervous system and provide positive healing energy

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**Gentle Manual
Therapeutic Techniques**

- Help to release tension
- Help to resolve milk stasis
- Help to stimulate blood flow to the mammary glands
- Blood circulation helps to release oxytocin
- Movement will help to increase lymphatic flow

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Thank You!

BreastKindness, LLC

www.mayabolman.com

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