physiozest Women's Health

MASTITIS

INFLAMMATORY CONDITIONS OF THE LACTATING BREAST (ICLB)

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Mastitis is a common maternal complication of lactation and is defined as inflammation of the mammary gland (6). It occurs in up to 20% of lactating women in Australia, with most cases occurring within the first 2-6 weeks postpartum (2).

Mastitis contributes to early cessation of breastfeeding in mothers, even though it can be successfully prevented and treated by using timely and simple conservative management principles (3, 4). At Physiozest, we are experienced in providing women with mastitis education and treatment to assist in reducing inflammation as quickly as possible.

In the past, mastitis was regarded as a distinct singular condition, however, new evidence demonstrates that it encompasses a spectrum of different inflammatory conditions and may therefore be better classified under the umbrella term "Inflammatory Conditions of the Lactating Breast (ICLB)" (3, 4).

Causes

Multiple factors can contribute to ICLB, including hyperlactation and diversity of the milk microbiome (dysbiosis). Dysbiosis can result from maternal genetics, medical conditions, antibiotic exposure, probiotic use, regular use of breast pumps and caesarean birth. Milk stasis has been postulated as a factor however evidence to date has not proven causation (4).

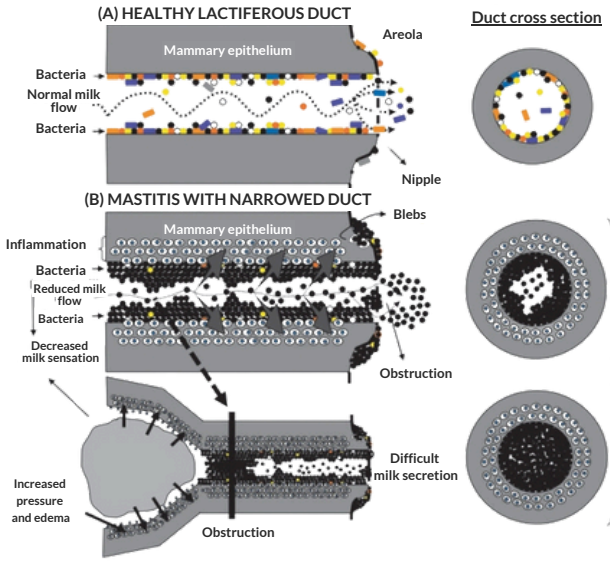

Figure 1 - dysbiosis and inflammation effect on duct

Hyperlactation	• The breast requires feedback inhibition to regulate milk production • Reducing overstimulation allows for regulatory hormones to activate and milk production to decrease • Overstimulation of milk production --> worsening congestion of breast tissue
Ductal Narrowing	• Tender, mildly erythematous, focal or global area of tissue, no systemic symptoms • Can resolve spontaneously • If persisting; physiological breastfeeding + anti-inflam measures are the most effective treatment • Ongoing narrowing --> inflam response progresses + systemic symptoms present--> inflammatory mastitis can develop
Inflammatory Mastitis	• Erythematous, oedematous, painful region of the breast with systemic signs e.g. fever, chills, tachycardia • Far more common for systemic symptoms to be part of inflam response (Systemic Inflammatory Response Syndrome), NOT a sign of bacterial infection (4) • Worsening symptoms of inflam mastitis --> may progress to bacterial mastitis
Bacterial Mastitis	• Evidence suggests clinical signs cannot confirm if bacterial infection is present or not (6) • Will require antibiotics/probiotics to solve • Ongoing symptoms --> abscess or phlegmon may develop
Abscess	• Abscess requires drainage • 3-11% of women with mastitis will develop an abscess • Progressive erythema with palpable fluid collection in a well-defined area of the breast
Other Conditions	• Engorgement: distinct clinical entity, bilateral breast pain + firmness/ swelling occurring between days 3-5 postpartum (can be as late as 9-10 days). Should not progress to mastitis if managed appropriately • Phlegmons: fluid collections - deep massage may promote formation • Galactocele: milk collects in a cyst like cavity due to ductal obstruction - usually not overly painful or associated with systemic illness

Recommendations (1, 4) *(SORT evidence system)*

1. Decrease inflammation and pain (ice, NSAIDS, paracetamol, sunflower or soy lecithin) and utilise therapeutic ultrasound *(level 1-3, C evidence)*
2. Avoid deep massage, consider probiotics (Quiara) and reserve antibiotics for bacterial mastitis *(level 1-2, B evidence)*
3. Educate on breast anatomy and reassure women that symptoms will resolve with care and support *(level 3, C evidence)*
4. Advise to feed on demand and don't aim to empty breasts (hand expressing for comfort is okay), minimise breast pump usage, wear a supportive bra and avoid use of nipple shields *(level 2-3, C evidence)*
5. Treat hyperlactation, oversupply and nipple blebs (review with lactation consultant recommended) *(level 2-3, C evidence)*
6. Avoid sterilisation of pumps and avoid saline soaks, castor oil and other topical products *(level 3, C evidence)*
7. Assess for perinatal mood and anxiety disorders *(level 3, C evidence)*

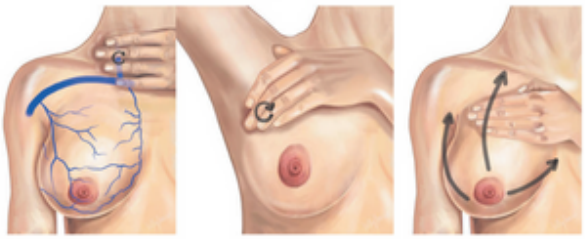

Figure 2 - Lymphatic draining technique (effleurage)

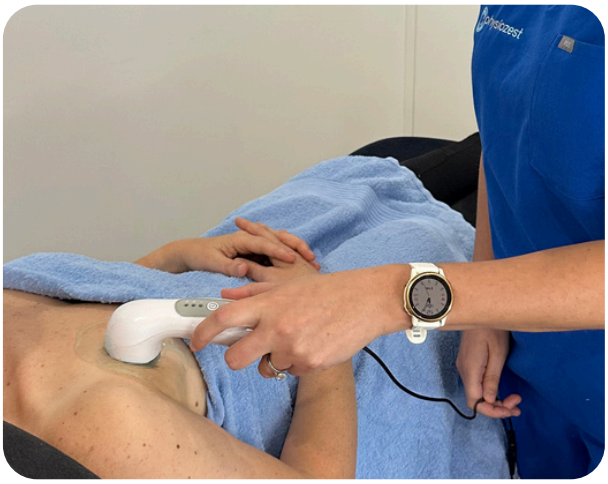

Image 1 - Therapeutic ultrasound

Physiotherapy Treatment (4)

Lymphatic Draining/Effleurage	• We use effleurage to drain fluid towards the underarm (lymph system) • We teach women to perform massage using very light pressure to "sweep the skin" from nipple to collarbone and armpit
Therapeutic Ultrasound	• Helps to reduce oedema and provide micro-massage to the breast tissue • Early treatment is essential and may require 1-3 sessions
Physical Assessment	• Nipple assessment • Observing breast for inflammatory signs, posture and positioning for feeding
Pectoral Stretches	• Tight breast tissue and posture can be a contributing factor to blockage • We can provide stretching, thoracic or fascial mobilisation and self-management exercises
Education	• Educate on the importance of continuation of breastfeeding, feeding regime, positioning, pumping, support and breast management • See lactation consultant if required
Ice/Heat	• Ice and NSAID's useful for ICLB • Can use heat if just a blocked duct with no signs of inflammation
Taping	• K-tape is an option to assist with lymphatic drainage
Problem Solving	• Problem solve why blocks are occuring: baby slept longer, feeding routine, over supply, pumping, tight bra, lying on stomach, over-handling breast, fibroadenomas etc.

References

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