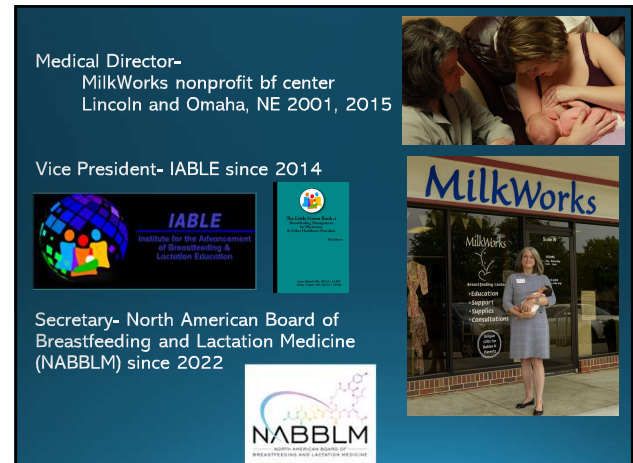
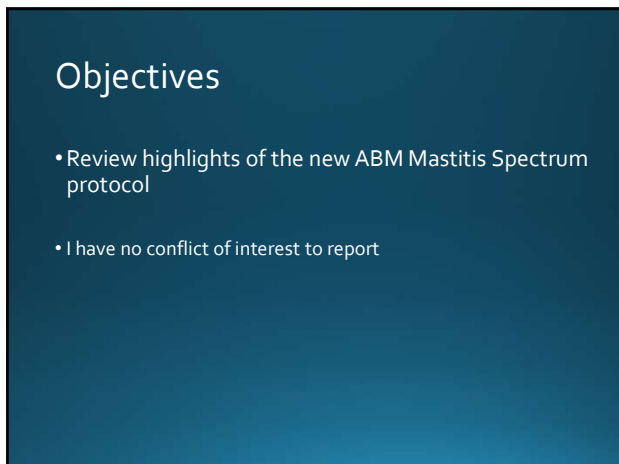


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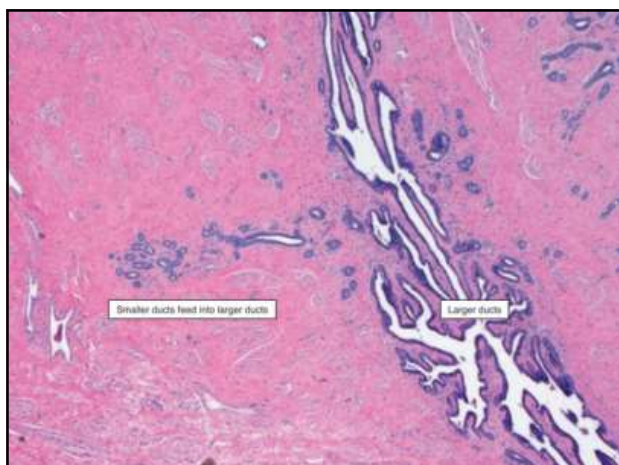
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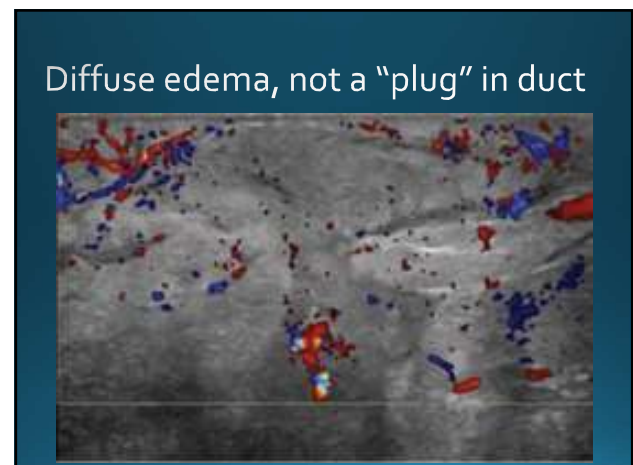
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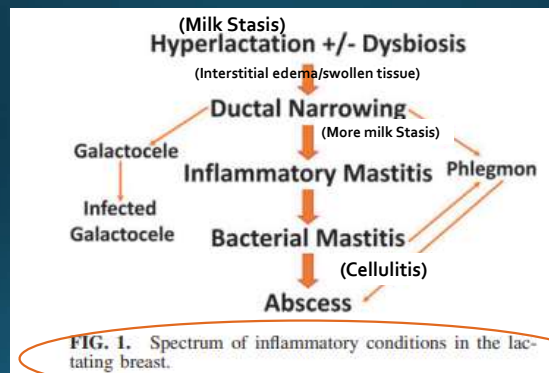


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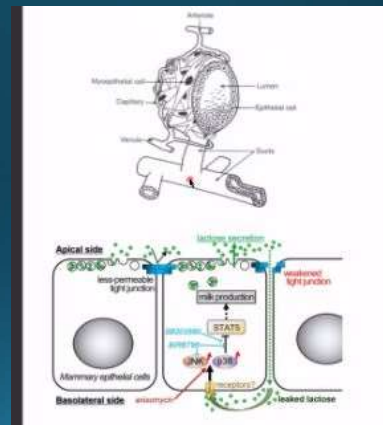
6

## The mastitis spectrum:



7

## Leaky tight junctions



8

## Changes from traditional thinking:

- "Plugged duct" originated assuming there was a plug of milk in the duct obstructing milk flow, rather than diffuse swelling between the ducts.
- Fever does not always mean infection- try conservative measures, then "evaluation by a medical professional should be performed if there are persistent systemic symptoms (>24 hours)". It should be emphasized that systemic inflammatory response syndrome may occur in the absence of infection."

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## Changes from traditional thinking/common recommendations:

- Aggressive massage is NOT recommended, as may make swelling worse or distribute bacteria, causing phlegmon.
- Cold is applied to decrease swelling, as heat might increase swelling.
- Not clear that nipple wounds increase risk
- Avoid increased frequency of milk removal
- No published data on Epsom salt soaks in a Haaka

10



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## Mastitis Treatment

- Reassurance/education
- Ice
- Usual breast drainage (or improved if not happening!)
- Ibuprofen
- Treat associated nipple bleb(s)- triamcinolone 0.1% ointment applied to bleb 3 times a day (NO research) Do not unroof with a needle!!!



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## Mastitis treatment (continued)

- Address hyperlactation if present
- Therapeutic ultrasound (2 publications)
- If +plugged duct and symptoms not improving within 12–24 hours...OR high clinical suspicion initially
- Consider probiotics- "Limosilactobacillus fermentum (formerly classified as Lactobacillus fermentum) or, preferably, Ligilactobacillus salivarius (formerly classified as Lactobacillus salivarius) strains."
- Evaluate for PMADS if recurrent "plugs"

**First line**

- Dicloxacillin or flucloxacillin 500mg QID for 10–14 days
- Where dicloxacillin and flucloxacillin are not available, cloxacillin can be used alternatively; however, oral bioavailability is more variable with cloxacillin.<sup>70</sup> All drugs have low Relative Infant Dose of the drug.<sup>70</sup>
- Cephalosporin 500mg QID for 10–14 days
- Broader coverage including gram negative rods; does not need to be taken separately from meals

**Second line**

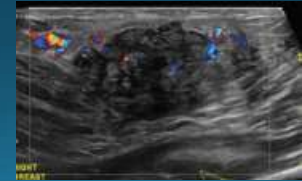
- Clindamycin 300mg four times daily for 10–14 days
- Trimethoprim-sulfamethoxazole DS BID for 10–14 days

⊙ Not recommended for mothers of children with G6PD deficiency. Use with caution in mothers with premature infants or infants with hyperbilirubinemia, especially under 30 days old.<sup>77</sup>

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## Lactational Phlegmon...

Is a "complex, and ill-defined fluid collection... in the setting of inflammation. Phlegmon should be suspected with a history of mastitis that worsens into a firm, mass-like area without fluctuance. It can be confirmed on ultrasound."



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Breastmilk culture is indicated if:

- there is no response to antibiotics within 2 days
- the mastitis recurs
- the patient is allergic to usual therapeutic antibiotics
- a severe or unusual case



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## Needle aspiration of abscess



FIG. 14. Ultrasound image showing fluid collection (black) with needle entering (white).

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Stab wound with scalpel—no suction or packing!!!



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drleeper@milkworks.org

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