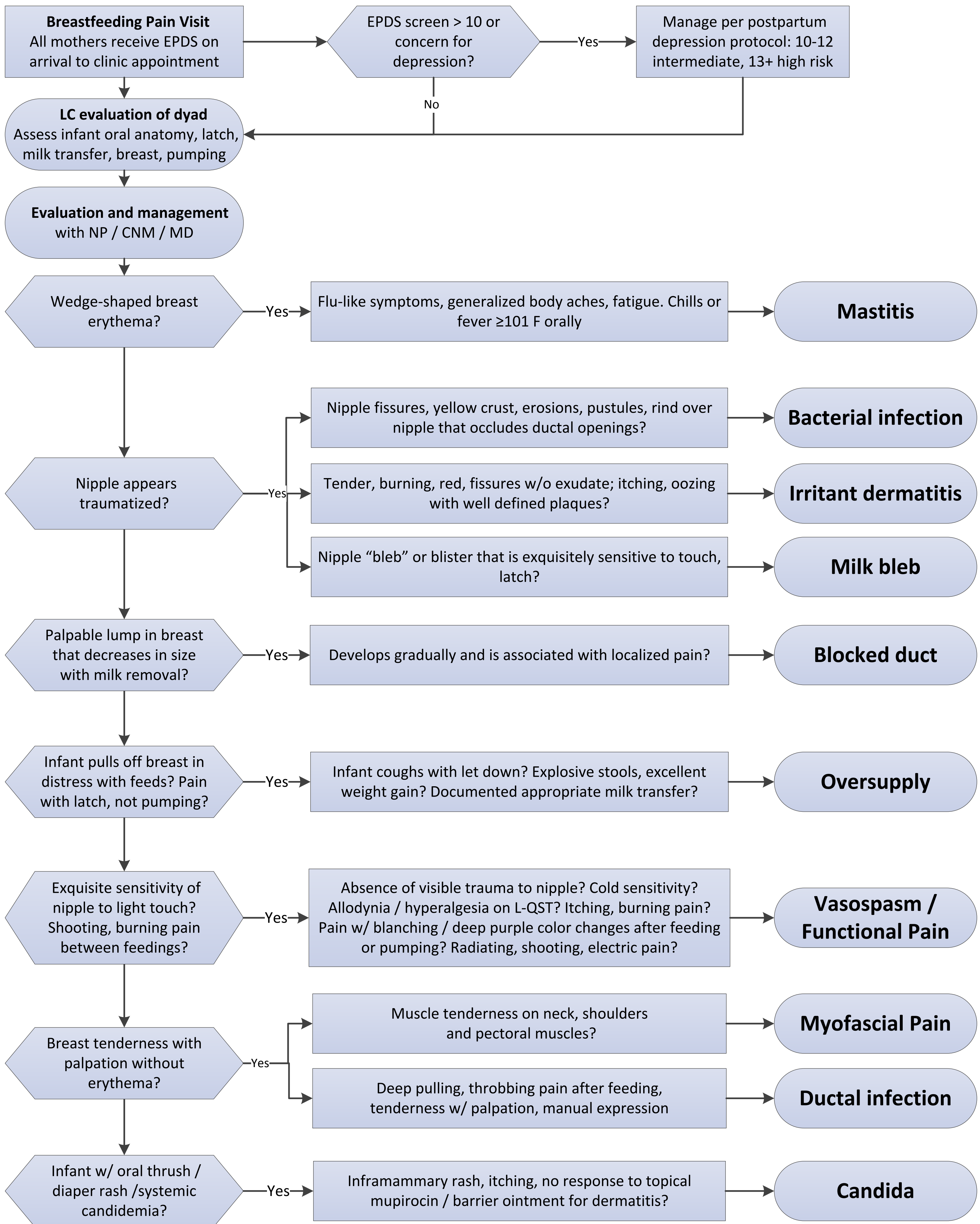

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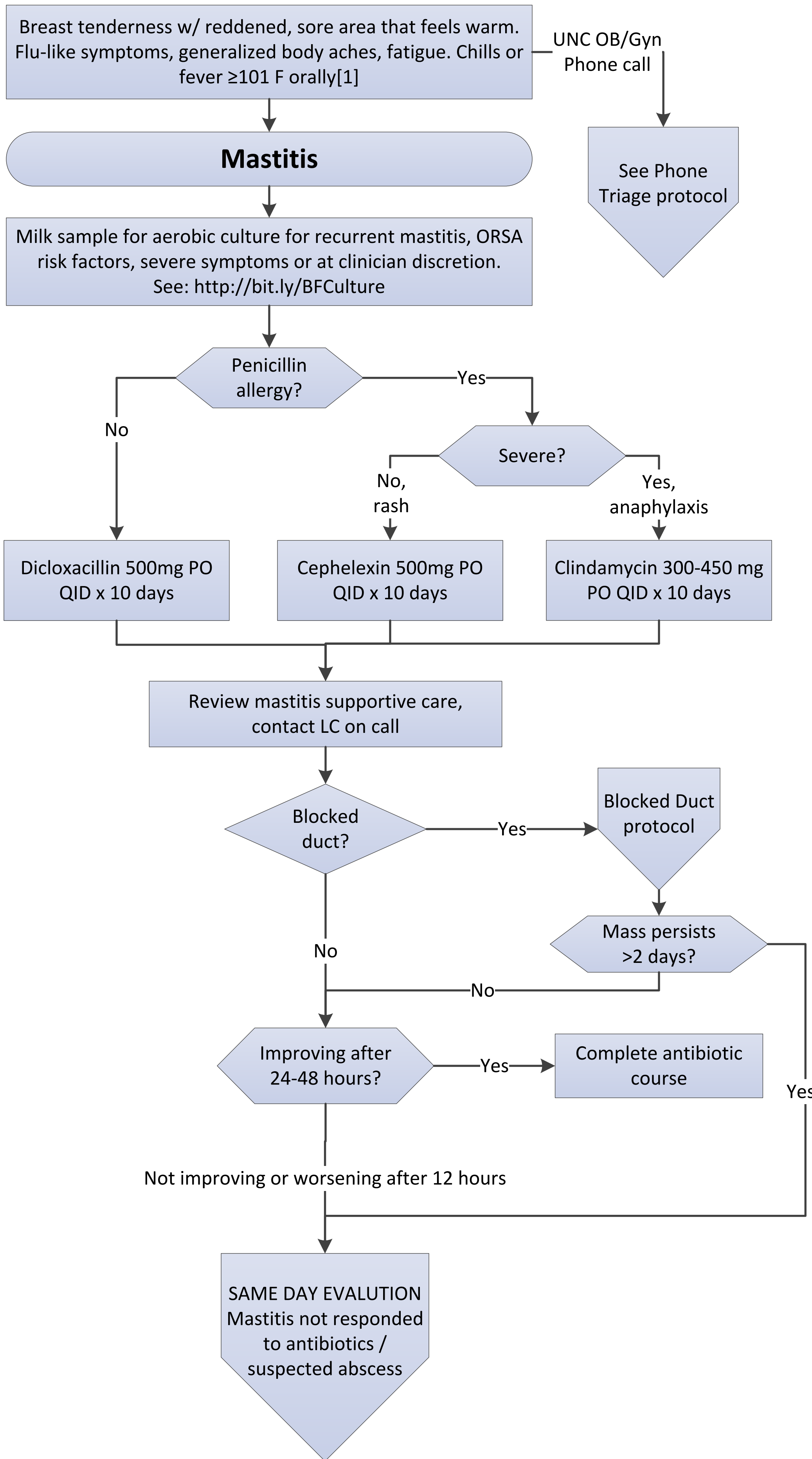

Risk factors for ORSA
Recent hospitalization
Residence in a long term care facility
Recent antibiotic therapy
Injection drug use
Hemodialysis
Incarceration
Military service
Sharing needles, razors or other sharp objects
Sharing sports equipment
Health care worker
Poorly controlled diabetes

Supportive Care
"Rest, fluids, empty the breast." No risk to infant continuing breastfeeding during infection, risk to mom with abrupt weaning.
Nurse / pump every 2-3 hours.
For pain and fever, recommend: Acetaminophen 650mg q4-6 hours (maximum 3500 mg/day) or Ibuprofen 600 mg q6h. Counsel patient that symptoms should improve in 24 to 48 hours. If symptoms progress after 12 hours or persists after 24-48 hours, she should be seen in clinic by a licensed independent provider, or come to the ER if after hours or weekend for evaluation.

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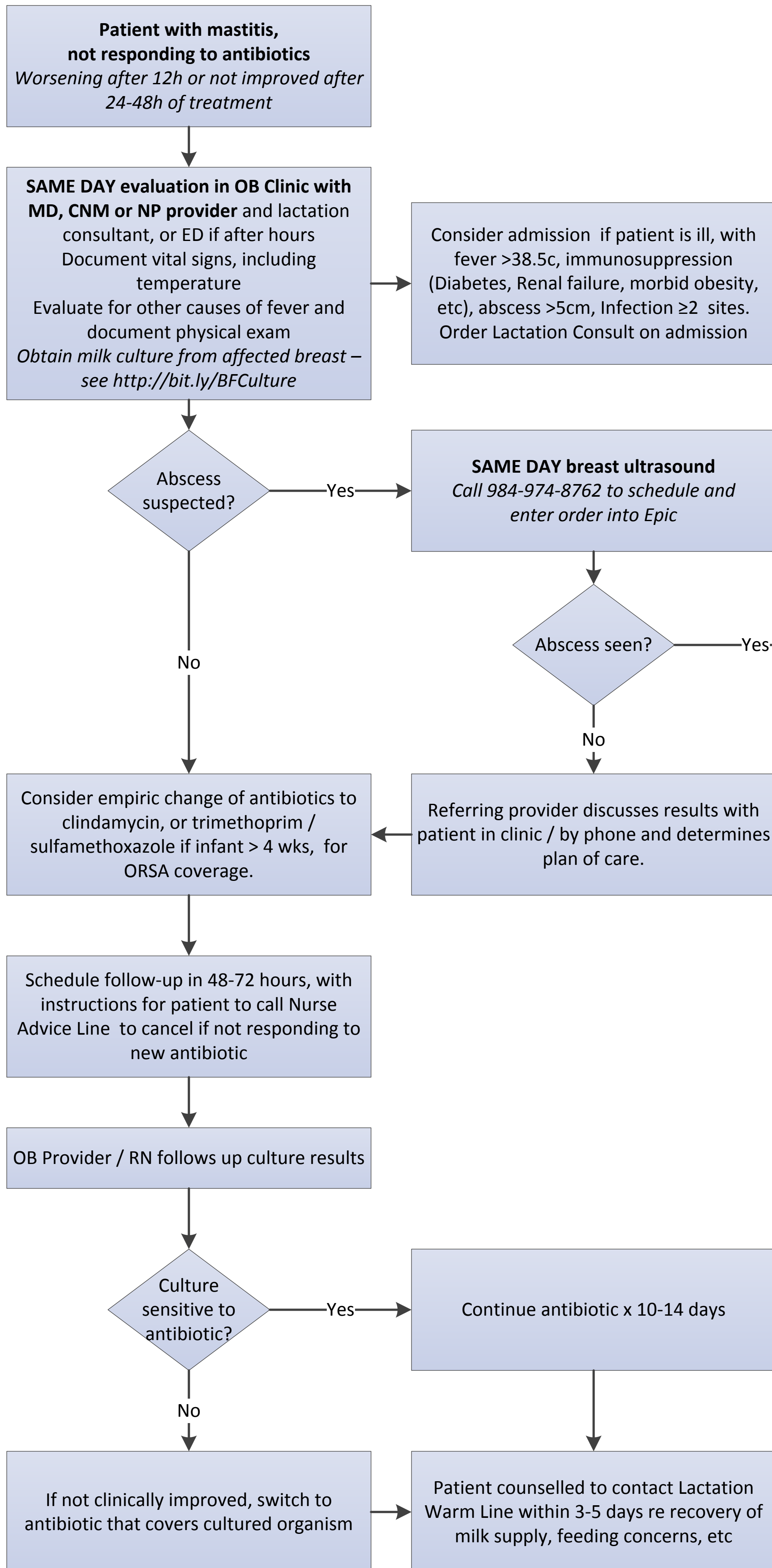
Mastitis not responding to antibiotics / suspected abscess



Mastitis not responsive to antibiotics is an abscess until proven otherwise.

Patients should be evaluated on the SAME DAY, either in clinic by a Licensed Independent Provider or in the Emergency Department.

Radiologic evidence of an abscess requires drainage by radiology or SAME DAY evaluation by the breast surgery team.

Reference information
4-xxxx = 984-974-xxxx

Phone contacts

Mammography / breast imaging scheduling	4-8762
Surgical Oncology Clinic Work Room	4-8220
ED Triage *Ask to speak to Team D Attending*	4-4721
GYN resident on call	216-6234
OB Nurse advice line	4-6823
Lactation Consultation	
Outpatient clinic pager	347-1562
Outpatient mobile phone	4-9245
Warm Line for patient calls	4-8078

ICD10 codes for breast imaging order
O91.12 Breast Abscess
O91.22 Non-purulent mastitis
O92.79 Other Disorders of Lactation

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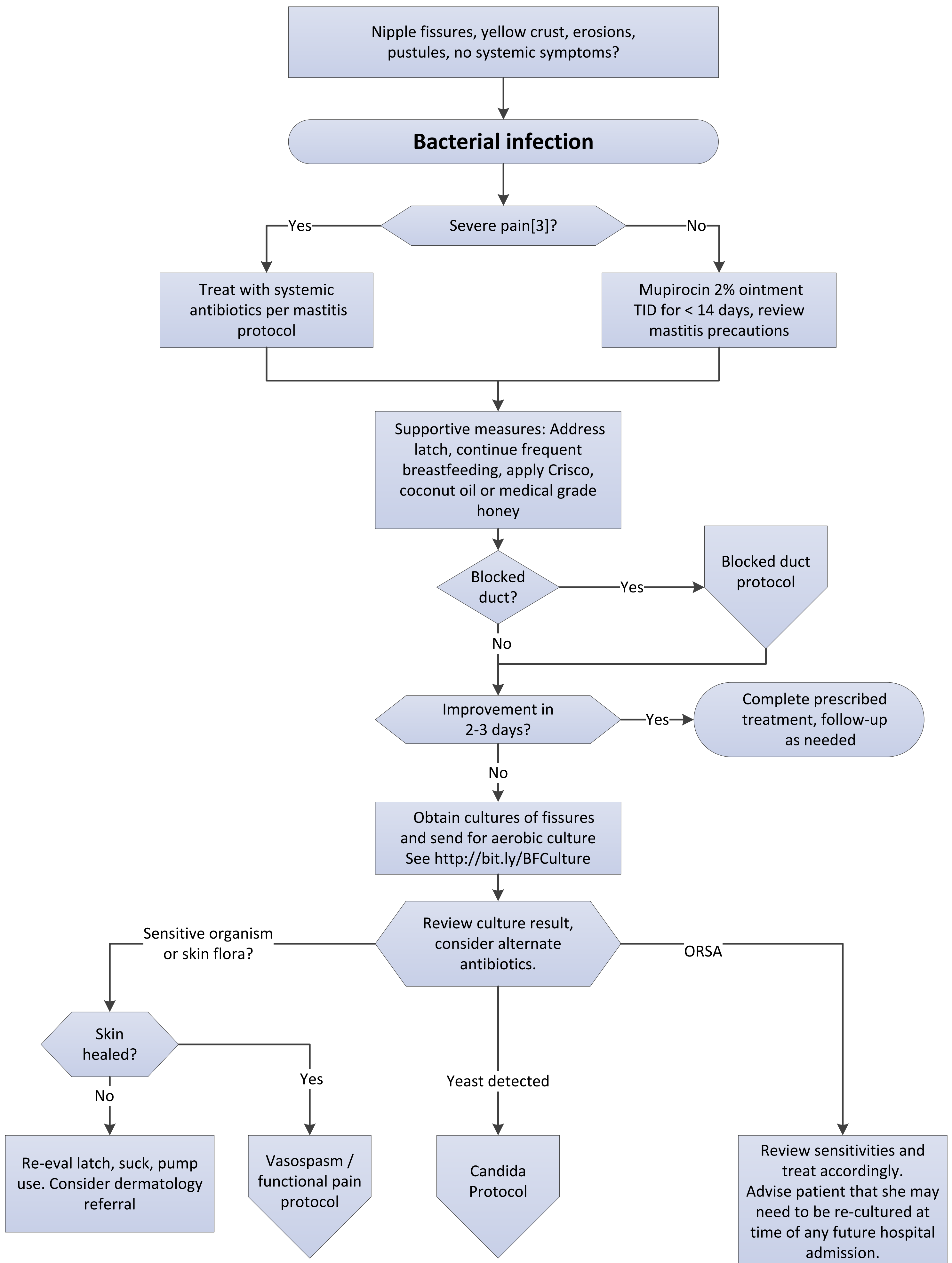

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Tender, burning, red, fissures w/o yellow exudate; itching, oozing with well-defined plaques[4].

Dermatitis

Tender, burning, red, fissures w/o yellow exudate, ill-defined borders

Irritant Dermatitis
For severe symptoms, consider medium potency steroid– 0.1% Triamcinolone 2-3 times a day x 7 days

Itching, oozing with well-defined plaques, excoriations.

Contact dermatitis
Remove cause – topical creams, wipes, moisturizes; assess for pattern matching pump flange.
Switch to hypo-allergenic detergent. If infant eating solids, rinse nipple after feeds – food in mouth may be allergen.
Apply medium potency steroid – Triamcinolone 0.1% ointment –2-3 times a day x 14 days.
For severe itching, consider Cetirizine (Zyrtec), balancing theoretical risk of decreased milk supply.

- Apply barrier ointment (Crisco, Coconut oil, Medical Grade Honey, Petrolatum) after each feed.
- Consider covering nipple-areolar complex with gauze or nipple shells. Wear cotton bras.
- Hydrogels should not be used with barrier ointment.
- If using Petrolatum and ointment is still visible before the next feeding or pumping, wash off the nipples with water and gentle cleanser (Cetaphil, equivalent generic).

Not improved in 5-7 days?

Nipples swab for aerobic culture http://bit.ly/BFCulture

Review final culture result

Negative culture, Persistent pain

Skin healed?

No

Re-eval latch, suck, pump use. Consider dermatology referral

Yes

Vasospasm / functional pain protocol

Positive yeast screen

Candida Protocol

Staph or other bacterial pathogen

Treat per bacterial infection protocol

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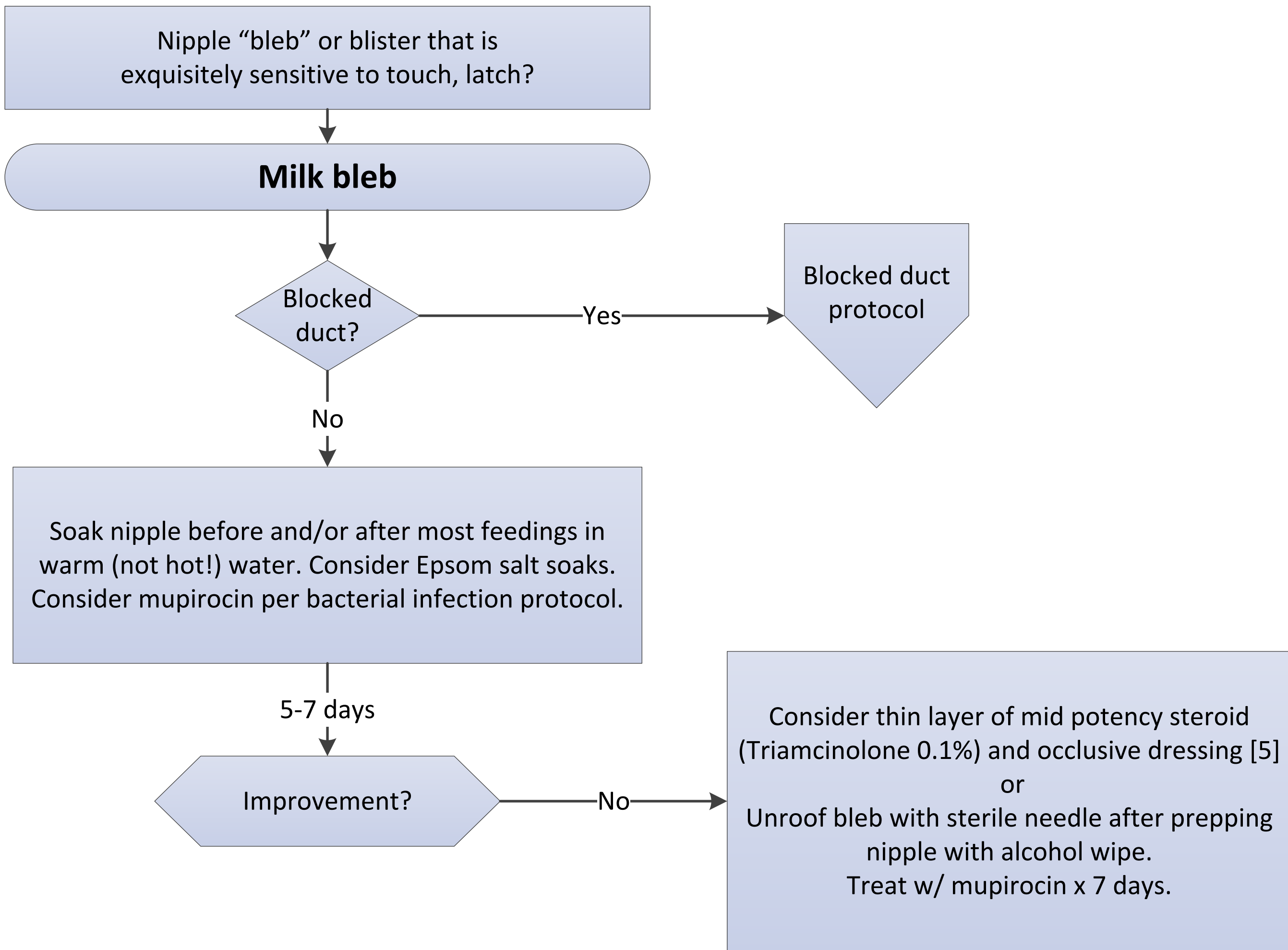

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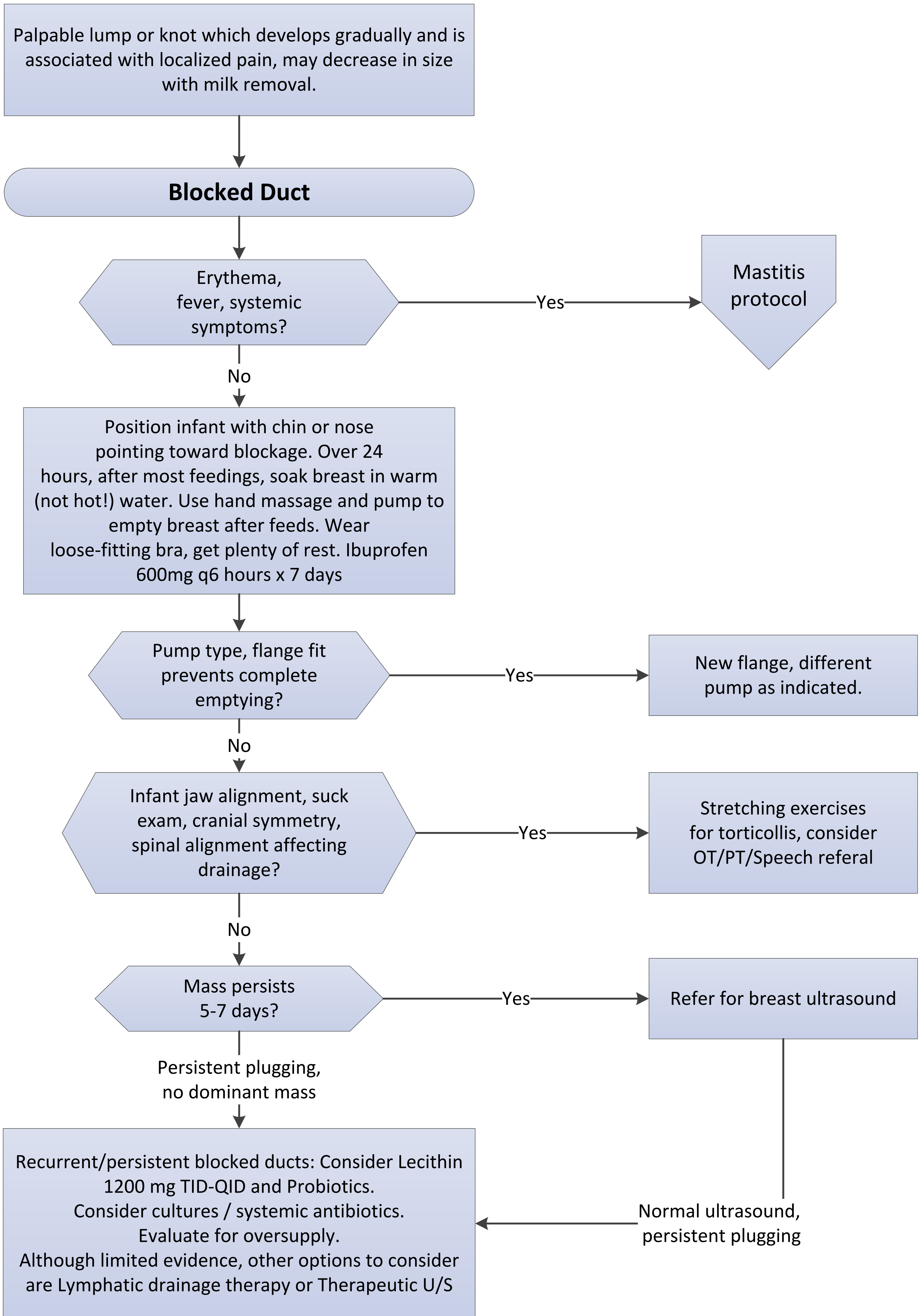

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Infant pulls off breast in distress with feeds? Pain with latch, not with pumping? Infant coughs with let down? Fussy, colicky baby with reflux, short, frequent feeds, green or mucousy stools, excellent weight gain? Documented appropriate milk transfer? Onset 3-6 wks pp? [6-7]

Full drainage / scheduled block feeds
Using a double electric pump, empty both breasts completely. Feed baby on both sides after drainage. This provides infant slow-flow, fat-rich hind milk.
Following full drainage, block feed by offering infant one breast for all feedings for 3 hours, and then switch to the other breast. Gradually increase the length of the blocks as needed to down-regulate milk production.

Ref: [7] van Veldhuizen-Staas C,. Int Breastfeed J 2007 http://bit.ly/NIOO5w

Oversupply

Overactive milk letdown?
- Yes → Let down into burp cloth before latching baby
Laid Back positioning → Overproduction?
- No → Overproduction?

Overproduction?
- Yes → Supportive measures:
  - Reduce pumping to pump to comfort, not to empty.
  - Consider alternating sides for feeds, ibuprofen 600mg q6 hours.
  - Follow-up 7-10 days.

Response to supportive measures?
- Yes → Continue to alternate breast with feeds, taper heat / NSAIDs as tolerated.
- partial → Infant > 3 Weeks old?
  - Yes → Consider full drainage and/or scheduled block feeds to decrease supply. Consider pharmacologic measures: sage, sudafed, estrogen-containing OCPs
- No → Breast tender with deep palpation?
  - Yes → Culture per ductal infection protocol
  - No → Reevaluate suck, latch, pump use, consider alternate diagnoses

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Absence of visible trauma to nipple?
Exquisite sensitivity of nipple to light touch?
Shooting, burning pain between feedings?
Cold sensitivity?
Allodynia / hyperalgesia on L-QST[8]?

Vasospasm / Functional Pain

ibuprofen 600mg q6 hours for inflammation.
Counsel re mindfulness, deep breathing,
"Suffering = pain x resistance"
Consider massage for trigger point release.

Trial of medical management, ordered based on history & exam findings

Add one medication at a time and use it for 3-5 days. If the pain is gone, continue the medication. If the pain improves somewhat, continue the medication and add the next one. If there is no change in the pain, stop the medication before adding the next one.

Functional dysautonomia / Centrally mediated pain syndromes [9,10]

Non-painful

· Syncope
· Postural Tachycardia Syndrome(POTS)
· Chronic Fatigue Syndrome
· Cyclic Vomiting Syndrome

Painful

· Functional Dyspepsia
· Functional Abdominal Pain
· Abdominal Migraine
· Migraine Headache
· Irritable Bowel Syndrome (IBS)
· Interstitial Cystitis
· Complex Regional Pain Syndrome (CRPS)
· Raynaud's Syndrome
· Fibromyalgia
· Myofascial Pelvic Pain
· Dysmenorrhea
· Dyspareunia

Histamine-mediated pain [8]

Itching, burning pain
Sensitive skin / dermatographia
History of allergic reactions - environmental allergies, food sensitivities, hives, drug allergies

Non-sedating antihistamine [8]

Choose agent patient has tolerated well in the past
Consider adding H2 blocker if already taking H1 blocker
Review theoretical risk of reduced milk supply

Vasospasm [8,9]

Pain with blanching / deep purple color changes after feeding
History of Raynaud's or cold sensitivity
Pain improves with heat
Pain w/ cold air exiting shower

Heat to breasts after feeding – warm rice sock, reflective breast warmers
Dress warmly, wear vest, control ambient temperatures
Reduce caffeine

Nifedipine XL 30 mg [8,9]

Review orthostatic precautions, side effect of headache. Hydrate well.
Use caution for blood pressure <100/70

Neuropathic pain[8]

Radiating, shooting, electric pain
Visible, lacy capillaries - Asbill sign [8]
History of functional pain
Allodynia or hyperalgesia on L-QST
Pain drying breasts with towel

Propranolol 10-20 mg TID for centrally mediated pain syndrome[8,11]

Titrate up to maximum dose 240mg/ QD, keeping HR >60
When stopping, taper by 20 mg/day
Review side effects: fatigue, mood changes
Assess resting heart rate before increasing dose

Persistent symptoms?

Yes →

Second line options to consider: Acupuncture
Nortriptyline 25-50 PO QHS, titrate up q2-3 days, max dose 150mg/day.
Duloxetine (Cymbalta) – 30 mg PO QD x 1 wk, increase to 60 mg QD
Consider milk cultures per ductal infection protocol [10]

No →

Taper medications one at a time, titrating to symptom control

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Muscle tenderness on neck, shoulders and pectoral muscles?

Myofascial Pain

Multimodal management, per patient's preferences

References

Preventing Musculoskeletal Pain in Mothers Ergonomic Tips for Lactation Consultants
http://bit.ly/ErgoBF

Severe Breast Pain Resolved with Pectoral Muscle Massage
http://bit.ly/BFStretch

NSAIDs
ibuprofen 600mg q6 hours for inflammation

Positioning during feeding
Semi-reclined position w/ knees slightly higher than hips
Place small pillow / towel against low back
Bring baby to breast, rather than breast to baby, to protect neck and shoulders
Consider a pillow to support mother's forearm and shoulder

Side-lying feeding
Place a pillow between mother's knees or ankles

Baby wearing
Consider visiting a baby-wearing group to get help with fitting and using a baby carrier. Find a local chapter at https://babywearinginternational.org/

Pectoralis Stretching and Massage
Stand in a doorway and place one arm against the door frame, with your elbow slightly higher than your shoulder. Relax your shoulders as you lean forward, allowing your chest and shoulder muscles to stretch. Hold for 15-30 seconds, and repeat 2-4 times for each arm.

Massage the upper pectoral muscles with your flat hand.
Massage the serratus muscles with the tips of your fingers.

Consider a postnatal yoga class

Referrals for management of myofascial pain
Therapeutic massage / trigger point release
Physical therapy
Acupuncture

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Deep pulling, throbbing pain after feeding, ternderness on breast palpation, pain with manual expression

Ductal infection

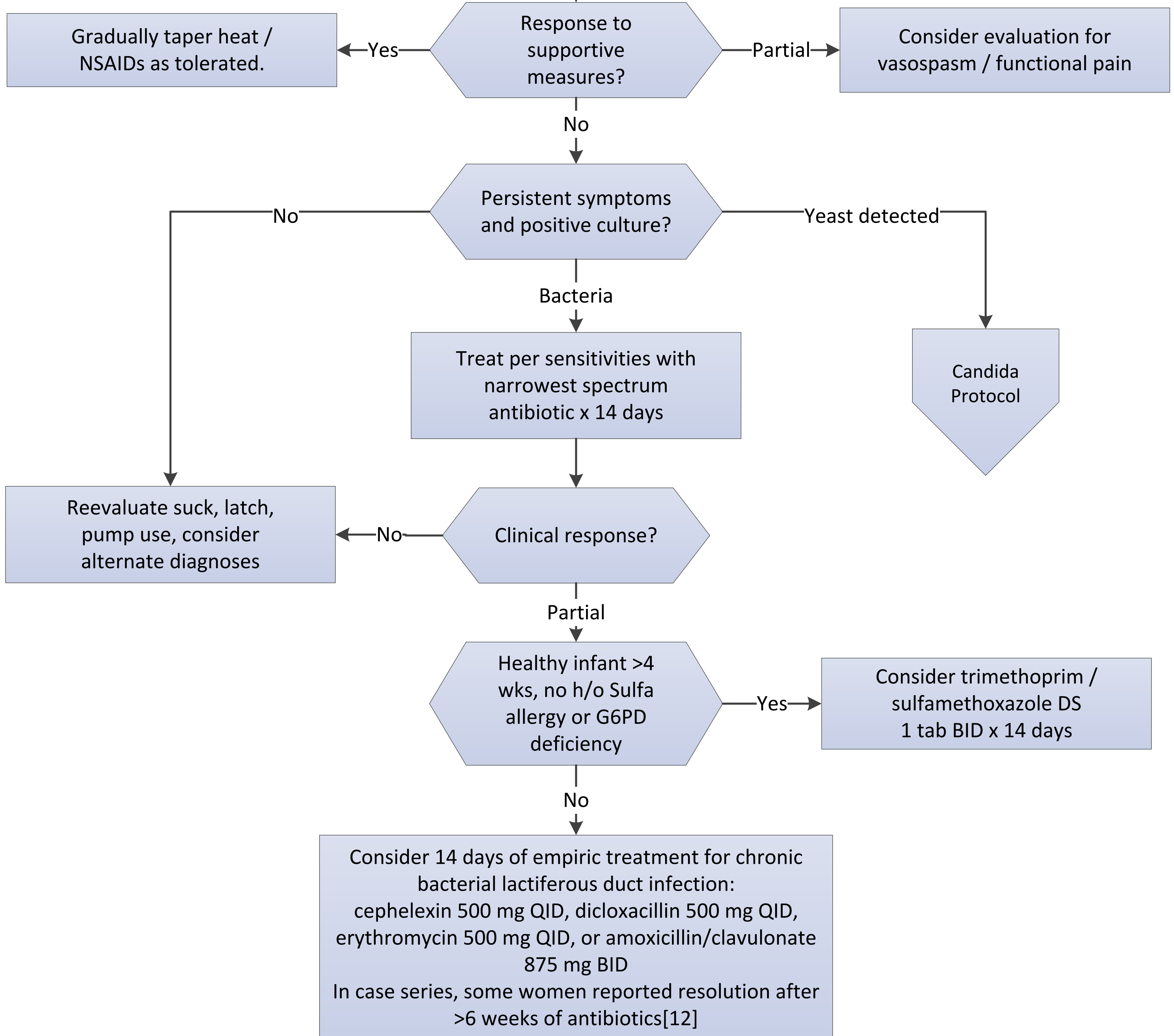
Obtain milk cultures for
aerobic culture
See http://bit.ly/BFCulture

Supportive measures:
Warmth to breast after feeds per vasospasm protocol, probiotics and ibuprofen 600mg q6 hours.
Follow-up 5-7 days.

Choosing a probiotic

For buying commercial probiotics, just to make sure that:
* They are kept refrigerated
* The more ufc (cells) the better
* Get something that contains multiple strains
* Get the product with the furthest expiration date

With regards to prebiotics, there are probiotics preparations that come with prebiotics (they are called synbiotics), look for inulin, FOS, or GOS.



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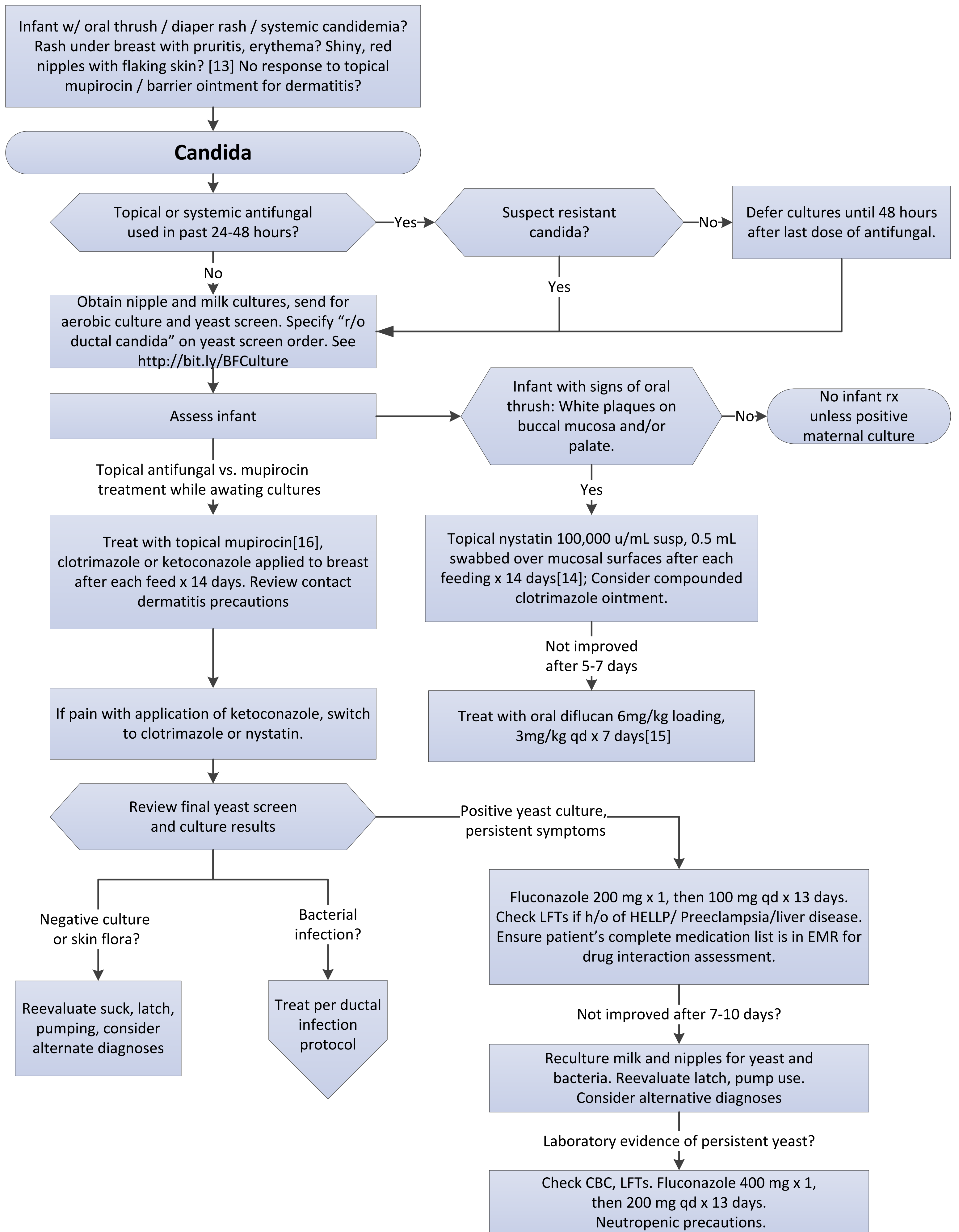

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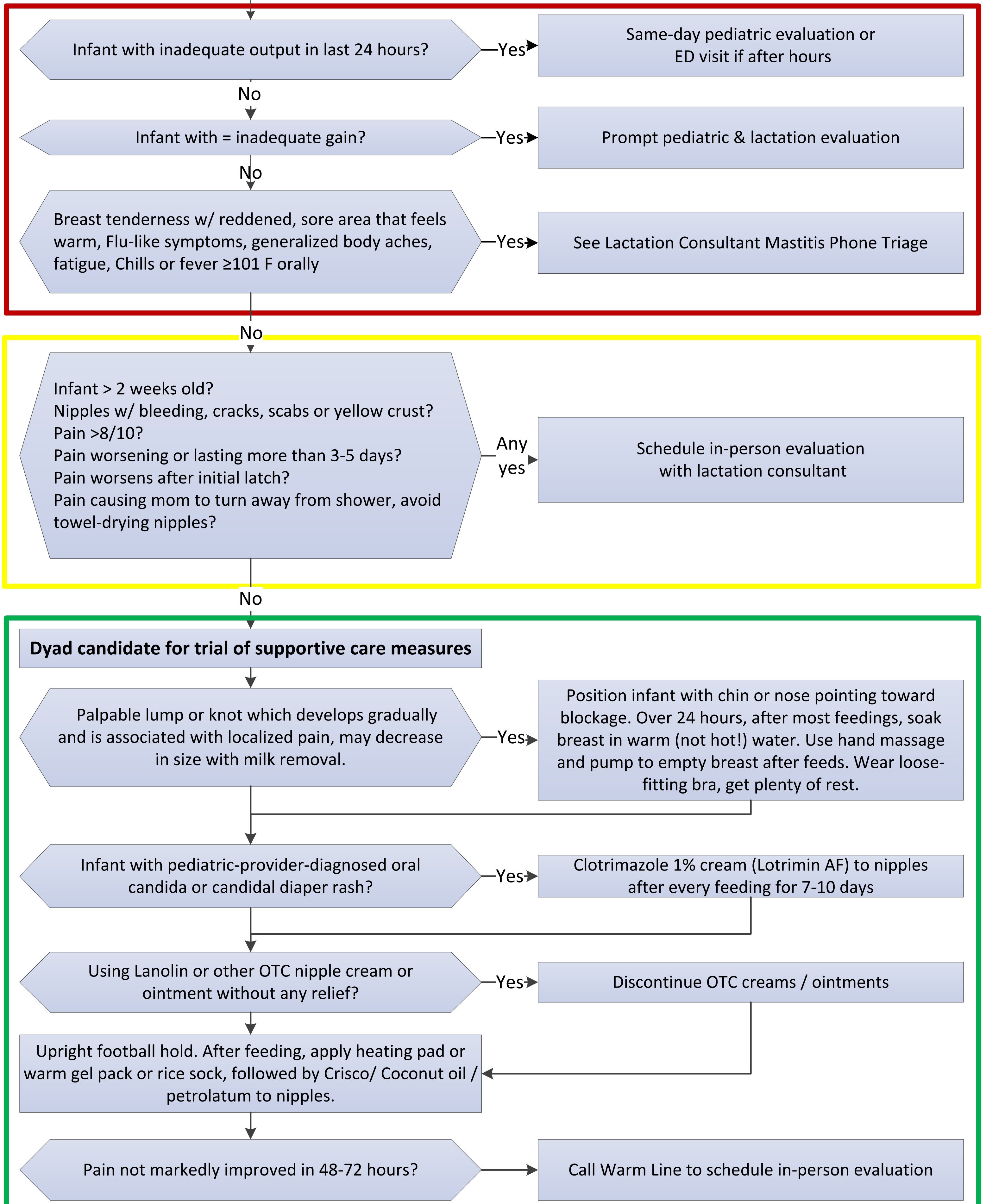

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Glossary

Asbill's Sign: Pink lacy capillary pattern
Crisco: Regular shortening used in cooking, used as barrier for sensitive skin and dermatitis
QST: Quantitative Sensory Testing
Medical grade honey: Irradiated honey to facilitate wound healing
Shower Sign: Cold air hitting breasts when getting out of shower is painful, pain in frozen food section of grocery store or when opening the freezer,
Towel Sign: Touch of a towel or dress is excruciating
Yeast screen: highly sensitive microbiology assay for yeast – order to r/o ductal candida

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