COMMON BREASTFEEDING PROBLEMS AND
BREASTFEEDING THE LATE PRETERM INFANT

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OBJECTIVES

At the end of this session, the participant will be able to:

1. Diagnose and manage common breastfeeding concerns
   - With a focus on maternal factors and interventions feasible for OB/FP providers

2. Explain the unique challenges late preterm infants face in breastfeeding, and be prepared to support successful breastfeeding in this group
OVERVIEW

• Common maternal breastfeeding issues:
  – (Perceived?) insufficient milk supply
  – Nipple pain/breakdown
  – Breast yeast infections
  – Raynaud’s phenomenon of the nipple
  – Plugged duct, mastitis, and breast abscess
  – Medications and drugs

• Problems and solutions specific to breastfeeding late preterm infants
INSUFFICIENT MILK SUPPLY: REAL OR PERCEIVED?

- Common concern (50% of breastfeeding mothers), many contributors:
  - Lack of education re: normal breastfeeding patterns and behavior
  - Fussy baby, baby “must be starving because they want to eat constantly”
  - Soft breasts/lack of engorgement
  - Ease with which infant eats from a bottle
  - Inability to express large volumes
  - No let-down
INSUFFICIENT MILK SUPPLY

• Only 5% of women actually have inadequate milk supply
  – **Common Causes:**
    • separation of mother-infant dyad
    • strictly scheduled intervals between feedings
    • poor latch/position
    • early use of pacifiers or bottles
    • maternal medications (decongestants, antihistamines, estrogen – including combination OCPs)
    • maternal pain or stress (delayed milk ejection)
    • prematurity
  – **Less Common Causes:**
    • Hormonal: hypothyroidism, PCOS, Sheehan’s, retained placenta
    • Prior breast surgery: reduction, augmentation, nipple piercings
    • Anatomic: breast hypoplasia, inverted nipples

Akre, J. 1989
COMMON CAUSES OF LOW MILK SUPPLY

- Lack of early stimulation/milk removal
- Infrequent stimulation/milk removal
- Disregard for infant feeding cues
ASSESSING MILK SUFFICIENCY

• **Visual cues for feeding interaction**
  - Baby eagerly seeks breast, latches on, feeds; body tone (mother and baby) relaxes; full breasts; leakage from the opposite side

• **Auditory confirmation**
  - Suck swallow ratio variable but not consistently more than 4:1

• **Infant weight**
  - 0-90 days: 20-30g/day
  - 90-180 days: 15-20g/day
  - Back to BW by 2 wks
  - No more than 10% weight loss in first 5 days***
    • ***If Mom’s milk is just coming in, may not need to supplement even if weight loss is 10-12%
MANAGEMENT OF MILK INSUFFICIENCY

• FIRST: Address the underlying cause(s)
  - Optimize position/latch
  - Increase frequency of feeds (*nighttime feeds may help*)
  - Express/pump after feeds
    • Hands-on pumping
    • Power pumping
  - Treat maternal or infant medical issues

• NEXT: Consider galactogogues
  - Herbal/natural remedies: fenugreek, mother’s milk tea, oatmeal, beer, brewer’s yeast
    • High dose fenugreek safe and effective though mechanism unknown: 3500mg divided TID
      - Caution in mothers with diabetes, peanut allergy
      - May cause diarrhea
  - Metoclopramide (Reglan): increases prolactin, may cause GI issues, anxiety, sedation, dystonia
    • 10mg PO daily-TID for 1-3 weeks

• THEN: Supplement if medically indicated
  - Ideally with EBM, 15-30mL after feeds
SORE/CRA CKED NIPPLES

• **Causes:** suboptimal latch, poor positioning, yeast infection (nipple or ductal), Raynaud’s, mastitis, infant ankyloglossia

• **Management:**
  - Optimize latch (and assess for ankyloglossia)
  - Breastmilk, air dry, lanolin
  - Newman’s nipple ointment: 15 g mupirocin 2% ointment + 15g BMZ 0.1% ointment + miconazole powder (for total concentration 2%)
  - Ibuprofen
  - Cool gel pads
  - Nipple shields: **CAUTION!**

Chow et al, 2015
NIPPLE/ DUCTAL CANDIDAL INFECTION

• **Predisposing factors**
  - Diabetes
  - Steroid or antibiotic use
  - Immunodeficiency
  - Nipple trauma

• **Nonspecific signs and symptoms (and no good microbio test)**
  - Nipple pain, itching, or burning sensation or shooting breast pains that radiate back towards the chest wall (possibly ductal candidal infection; may persist or worsen after feeding is complete and breast is drained)
  - Nipple wounds that do not heal w/ time and proper latch/positioning
  - Nipple and areola may appear erythematous or shiny or have white patches
  - NO external signs
  - Infant usually has thrush
TREATMENT OF CANDIDAL INFECTIONS

• **Treat mother and infant simultaneously** (2+ wks or for 2 days after symptoms resolve)
  - Infant: nystatin 100,000u/ml 1 cc PO QID
  - Mother:
    • Nystatin suspension/cream or clotrimazole applied after each nursing session
    • Fluconazole
      - 100-200mg po daily x 14-21 days if not improving w/ nystatin or for ductal yeast infections
      - 200mg po x 1 day, then 100mg po daily x 10-14 days

• **Sterilize bottles, pacifiers, pumping supplies**
RAYNAUD’S PHENOMENON OF THE NIPPLE

• **Frequently misdiagnosed**
  – May be etiology of pain in up to 25% of breastfeeding mothers
    • Nerve irritation from breastfeeding + increased estrogen → increased alpha-adrenergic receptors
    • Emotional stress → increased epinephrine → increased vasoconstriction

• **Vasospasm precipitated by cold**
  – Deep burning/shooting/throbbing pain that persists throughout the entire feed
  – Bi- or triphasic color changes

• **Treatment**
  – Warmth
  – Minimize vasoconstrictors (including caffeine, tobacco)
  – Nifedipine 30-60mg sustained release PO daily or 10-20mg immediate release TID x 2-3 weeks (longer as needed)

American Academy of Dermatology, 2011
PLUGGED DUCTS

• Tender lump
• Predisposing factors
  – Positions that don’t empty breast
  – Underwire bras
  – Mother holding breast while feeding
• Treatment
  – Ensure complete breast drainage
  – Massage
  – Warm packs
  – Position changes
BACTERIAL MASTITIS

- Most common in the first month, occurs in 5%-10% of breastfeeding women
  - commonly (25%) leads to lactation cessation
- Usually caused by Staph aureus (less commonly Strep or E. Coli)
  - Fevers, myalgias, breast pain
  - Wedge-shaped, tender, erythematous, unilateral
  - Upper, outer quadrant most common
- Risk factors: plugged ducts, untreated engorgement, cracked nipples, missed feedings, excessive fatigue
decreased resistance to infection

MASTITIS

• Treatment
  – CONTINUE BREASTFEEDING!
  – Monitor closely for abscess formation (3%) → needle aspiration or I&D
  – If mild and <24hrs, frequent breastfeeding with complete emptying, ibuprofen, warm packs
  – If moderate-severe or >24 hrs: dicloxacillin 500mg po Q ID, Augmentin 875mg PO BID, or cephalaxin 500mg PO Q ID x 10-14 days
    • Reserve clindamycin 300mg po Q ID for severe cases, recommend probiotics

Wei et al, 2016
MEDICATIONS, DRUGS, AND LACTATION

• **Medications: most are safe**
  - Small molecules (e.g. caffeine), lipid-soluble molecules (e.g. citalopram), and free unbound molecules (e.g. venlafaxine) are more readily excreted into breastmilk
    • Insulin, heparin have high molecular weights and are not excreted into breastmilk
  - Protein-bound molecules (e.g. sertraline, ibuprofen, and warfarin) are not readily excreted
  - **CONTRAINDICATED:** chemotherapeutics, lithium, oral retinoids, iodine, amiodarone

• **Iodinated and gadolinium-based contrast media: likely safe**

Nordeng et al, 2012; ACR Manual on Contrast Media, 2018; CDC, 2018
MEDICATIONS, DRUGS, AND LACTATION

- **Alcohol:**
  - Excreted in breastmilk, but unlikely to be harmful in moderation (1 drink/day)
  - May decrease milk supply (interferes with milk ejection reflex)

- **Methadone:**
  - May result in neonatal motor delays, but benefits outweigh risks (Breastfeeding should be encouraged)

- **Buprenorphine:**
  - No short-term negative effects, may ameliorate effects of NAS (Breastfeeding should be encouraged)

- **Other opioids:**
  - Short-term use generally ok, but avoid codeine (CYP2D6 ultra-rapid metabolizers may experience high morphine metabolite serum levels resulting in neonatal death)

- **Marijuana:**
  - Found in breastmilk at 8x plasma concentrations
  - Limited data suggests even low doses may have profound consequences for brain maturation with long-lasting alterations in cognitive function, emotional behaviors

- **Other illicit drugs:**
  - Breastfeeding generally contraindicated

Nordena et al, 2012; CDC, 2018; Reece-Stremtan, 2015
LATE PRETERM BABIES (34 0/7+)

- Neurological immaturity, disorganized suck, weak oral muscles, decreased stamina, suboptimal transfer
- Maternal-infant separation
- Maternal medical issues leading to prematurity may delay lactogenesis II
OPTIMIZING BREASTFEEDING FOR LATE PRETERM INFANTS

- Early skin-to-skin
- Cue-based feeding (but awaken at 4 hrs)
  - 8-12x/24hrs
- Limit feeds at the breast to 30-40 min total
- For ineffective milk transfer, suboptimal supply, and/or weight loss of >7%
  - Breast compression while infant suckles
  - Nipple shield
  - Supplementation
    - 5-10mL per feeding on day 1, 10-30mL per feeding thereafter
- Triple feeding regimens (breastfeed, supplement, express) as feasible; iron and vit D supplementation
REFERENCES

CONTACT INFO

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