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Evaluation and management of Candida/Thrush

1. Definition or Key Clinical Information (Gordon, 2018; International Breastfeeding Centre, 2021):

Thrush is naturally occurring on the body by an imbalance in the body can cause an overgrowth of *Candida albicans*. This may occur on the nipples or in the baby's mouth and eventually transferred to the nipples. Thrush is over diagnosed and there is usually a differential diagnosis that is more likely the cause of the problem.

2. Assessment

i. Risk Factors (Allam, 2022; Plachouri et al., 2022)

-Previous nipple damage, thrush affecting another part of the body, another family member having thrush, nursing parent or baby has been treated with antibiotics or corticosteroids, nursing parent is taking the contraceptive pill, bottle or pacifier use, anemia, diabetes, exhaustion and stress, breastpads not being changed frequently enough, high sugar intake

ii. Subjective Symptoms (Gordon, 2018)

-Unusually pink or red nipples, cracked or bleeding nipples, itching or burning nipples, a shooting deep pain within the breast, pain throughout a nursing session, white patches in the baby's mouth, yeast infections in the diaper area of the baby or the vaginal area of the nursing parent

iii. Objective Signs (Plachouri et al., 2022)

-Redness and/or scaling on the nipples, areolas are smooth and shiny, cracked nipples, white patches in the infants mouth

iv. Clinical Test Considerations (Plachouri et al., 2022)

-Culture of breastmilk or skin scrapings

v. Differential Diagnosis (Allam, 2022; La Leche League International, 2023)

-Latch and position challenges, vasospasm, dermatitis, subacute mastitis, nipple bleb, allergic reaction, sensitivity to nursing pad or bra, reaction to nipple ointment, bacterial infection, eczema, psoriasis

3. Management plan

i. Therapeutic measures to consider within the CPM scope (Allam, 2022; Canadian Breastfeeding Foundation, 2009; Gordon, 2018)

-Grapefruit seed extract-10 drops of Citricidal GSE in 1 oz. Of distilled water applied topically with an absorbant swab on nipple after feeding and in baby's mouth before feeding once every hour during waking hours. If no improvement after 2 days increase the mixture to 10-15 drops of GSE per 1 oz. distilled water. If the diaper area is affected, put the solution in a spray bottle to

apply during diaper changes. If difficult to get rid of, the nursing parent may need to take GSE capsules.

- Eliminate sugar from the diet

- 1% Gentian Violet on the nipple before and after feeding once a day for 3-4 days, used with a nipple ointment for dryness and olive oil on baby's skin to lessen staining

- Miconazole cream 2% applied to the nipple after every feed

- Hydrocortisone 1% cream after every feed

- Ibuprofen for pain

- Keep nipples dry, frequent hand washing, do not share towels or clothing with other family members, wearing 100% cotton undergarments, washing clothing in hot water, sterilizing bottle nipples, pacifiers, and toys, replacing toothbrushes

- Rinse nipples with a mix of vinegar in water or baking soda in water after every feed

- Taking garlic, B vitamins, and zinc supplements according to typical dosing instructions on bottle

ii. Therapeutic measures commonly used by other practitioners (Allam, 2022)

- Oral fluconazole with an initial dose of 150-400mg followed by a dose of 100-200mg daily for 10 days

- Miconazole oral gel 4x a day after feeds for babies >4 months old

iii. Ongoing care

- Check in daily for 3 days, then every other day until day 10 to see if treatment is effective. If there are no signs of improvement by day 3 then add or change the treatment plan. If there are worsening symptoms by day 3 or at any point after day 3, refer to the appropriate provider depending on the case.

iv. Indications for Consult, Collaboration, or Referral

- Refer to PCP or OB if oral fluconazole is needed

- Refer to OB or IBCLC if thrush is not resolving from therapeutic treatment or is recurring

- Pediatrician if baby requires miconazole oral gel

v. Client and family education

- Adding a probiotic can be helpful in reducing the risk of thrush, especially if taking an antibiotic

- Handout on effective latch to ensure that cracked nipples are being avoided and to lessen pain while nursing

- Instructions for Gentian Violet protocol

- Instructions for Grapefruit Seed Extract protocol

- Handout on tips to avoid worsening of thrush and risk factors on contracting thrush

- Ensure the client that this can be treated and prevented in the future

References

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