

D. m. presents



D. M. presents with mother and father for chief complaint of white stuff in mouth for 2 days, doesn't rub off, infant with increased crying, more difficult to calm. RELEVANT HISTORY Mom reports that D. M's symptoms include white formula looking stuff on tongue and inside mouth it won't go away, noticed this about 2 days ago but its getting worse. Infant with increased crying and not easy to comfort. BIRTH HISTORY: D. M. was a full term, Vaginal delivery. Birth weight 6lb 7ounces. Patient was discharged with mom and had no complications. No need for antibiotics, for mom or infant. ALLERGIES: NKDACURRENT MEDICATIONS: NonePAST MEDICAL HISTORY: NonePAST SURGICAL HISTORY: NonePAST HOSPITALIZATIONS: NoneNUTRITION: Enfamil lipil with iron 2-3 ounces every 3-4h hoursELIMINATION: Brownish-yellow soft-seedy stools 3-4 times per dayTRIAGE: HEIGHT: 22 inchesWEIGHT: 6lb 5 ouncesHEART RATE: Apical- 136RESPIRATIONS: 35BP: deferredTEMP: 98. 8 rectalPHYSICAL EXAMHEAD: Atraumatic, Normo-Cephalic, Anterior fontanel soft, Non-bulgingEYES: OS ; OD + red reflex; EOMI, PERRLA, no dischargeEARS: Bilateral top of pinna horizontal line with outer canthus of eyes. Right ; Left TM's non-injected, good cone of lightNose: Patent, no rhinorrhea, non-injectedMouth/Throat: Throat non-injected, uvula midline, MMM, white patches on tongue, lips, and buccal mucosaNeck: Supple, without lymphadenopathyLUNGS/CHEST: CTA bilat, good air exchange, no rales, rhonchi, or wheezes, Sats 100% on room air. Symmetrical chest rise, no retractionsHEART/CV: S1, S2, RRR, w/o murmur, pulses +2 (brachial, DP, PT, femoral)ABDOMEN: soft, round, non-tender, non-distended, no organomegaly, no palpable masses, normo-active bowel sounds, umbilical cord site clean dry and itactGENITALIA: nl female genitalia, no rashesMUSC/SKEL: -Barlow; -Ortalan, FROM, + BabinskiSKIN: Intact,

Mongolian spots to sacral area, milia to forehead, nose, and cheeks, new born dry scaly skin bilateral lower extremities, no diaper rash

NEURO/DEVELOPMENT: + Startle reflex, good sucking reflex, +Moro and hand grasp, normal motor strength and tone

ASSESSMENT: This case study will focus on the primary diagnosis of Oral Candidiasis (Thrush). Furthermore, it will include differential diagnosis, pathophysiology, symptoms, ancillary tests, treatment, and an anticipatory guidance plan for the primary diagnosis. On the basis of the relevant history of; white formula looking stuff on tongue and inside mouth which won't go away, noticed this about 2 days ago but it's getting worse. Infant with increased crying and not easy to comfort. The primary diagnosis to explore would be Oral candidiasis (Thrush).

PRIMARY DIAGNOSIS & DIAGNOSTIC FINDINGS: Oral Candidiasis, commonly called thrush, is commonly mistaken for formula remaining in the mouth (Burns, Barber, Brady & Dunn, 1996). *Candida albicans*, the organism usually responsible, may cause disease in any organ system (Whaley & Wong, 1999). It is a yeast like fungus that can be acquired from a maternal vaginal infection during delivery, by person-to-person transmission, or from contaminated hands, bottles, nipples, or other articles (Whaley & Wong, 1999). It is usually a benign disorder in the neonate and is often confined to the oral and diaper regions (Whaley & Wong, 1999). Thrush of the mouth occurs in healthy infants; later, it is rare except in debilitated infants, in those receiving immunosuppressive therapy, and in those with acquired immunodeficiency syndrome (AIDS) (Behrman, Kliegman & Arvin, 1996). Transmission of the infection from maternal vaginal moniliasis to the infant's oral mucosa is the primary means of infection in healthy newborns (Behrman et al., 1996). Thrush appears as whitish, velvety plaques noted on the lips,

tongue, and pharynx, often with a " milk-curd" appearance). Underneath the whitish material, there is red tissue that may bleed when plaques are removed (Behrman et al., 1996). These plaques cannot be wiped out of the mouth (Behrman et al., 1996). Assessment findings may also include decreased feeding, fever, and lymphadenopathy (Burns et al., 1996). Although the disorder is usually self-limiting, spontaneous resolution may take as long as 2 months, during which time lesions may spread to the larynx, trachea, bronchi, and lungs and along the gastrointestinal tract (Whaley ; Wong, 1999). Occasionally, the infant may appear to have some difficulty swallowing, or eat less vigorously (Whaley ; Wong, 1999).

DIFFERENTIAL DIAGNOSIS/ DIAGNOSTIC FINDINGSDifferential diagnosis include, but are not limited to; leukoplakia and oral lichen planus.

Leukoplakia is a precancerous lesion that develops on the tongue or the inside of the cheek as a response to chronic irritation (Smith, 2003). Lesions usually develop on the tongue but they may also appear on the insides of the cheek (Smith, 2003). " Hairy" Leukoplakia of the mouth is an unusual form of leukoplakia that is seen only in HIV-positive individuals (Smith, 2003). It consists of fussy white patches on the tongue, and less frequently elsewhere in the mouth (Smith, 2003). It may resemble thrush (Smith, 2003). The primary symptom of leukoplakia is a skin lesion on the tongue, or inside the cheeks, usually white or gray, thick, raised, or with a hardened surface (Smith, 2003) A biopsy of the lesion confirms the diagnosis (Smith, 2003). An examination of the biopsy specimen may find changes that indicate oral cancer (Smith, 2003). The goal of treatment is to eliminate the lesion (Smith, 2003). Lichen Planus (LP) consists of minute white papules, which form a reticular or plaque pattern; it is often difficult to differentiate from

leukoplakia (Chuang, 2004). Lesions are most commonly found on the tongue and the buccal mucosa; they are characterized by white or gray streaks forming a linear or reticular pattern on a violaceous background (Chuang, 2004). This condition may be related to a dermatologic problem (Chuang, 2004). Usually asymptomatic, patients may complain of burning sensations, a metallic taste, or pain, may last for weeks or years (Chuang, 2004). The first-line treatments of cutaneous LP are topical steroids, particular class I or II ointments (Chuang, 2004). Systemic steroids for symptom control and possibly more rapid resolution (Chuang, 2004). Many practitioners prefer IM triamcinolone 40-80mg every 6-8 weeks (Chuang, 2004). Oral lacerations have the potential to become malignant (Chuang, 2004). TREATMENT: Thrush is treated with topical/oral application of 1ml of nystatin (Mycostatin) over the surfaces of the oral cavity four times a day or every 6 hours is usually sufficient to prevent spread of the disease or prolongation of its course (Whaley ; Wong, 1999). Several other drugs may be used, including amphoterecin B (Fungizone), clotrimazole (Lotrimin, Mycelex), fluconazole (Diflucan), or miconazole (Monistat, Micatin) given intravenously, orally, or topically (Whaley ; Wong, 1999). To prevent relapse, therapy should be continued for at least 2 days after the lesions disappear (Whaley ; Wong, 1999). Sterilize nipples and pacifiers if baby is bottle fed (Burns, et. al., 1996). Apply nystatin to mother's nipples if breastfeeding (Burns et al., 1996). Thrush in infants may be painful, but is rarely serious (Burns et al., 1996). If recurrent look for other causes such as conditions associated with immunosuppression (Burns et al., 1996).