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The course and treatment tactics of oral mucosal diseases in pregnant women

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Abstract: Oral mucosal diseases during pregnancy, such as pregnancy gingivitis, pyogenic granulomas, oral candidiasis, and herpes simplex virus infections, are common due to hormonal and immune changes. These conditions can cause discomfort and complications for both mother and fetus. Prevention through good oral hygiene, regular dental visits, and proper nutrition is essential. Treatment strategies focus on safe, non-invasive therapies, including antimicrobial agents and antifungal treatments. Timely management ensures both maternal and fetal health during pregnancy.

Keywords: Oral mucosal diseases, pregnancy gingivitis, pyogenic granulomas, oral candidiasis, herpes simplex, prevention, treatment, pregnancy health.

Introduction: Oral health is an integral part of overall health, and its importance is magnified during pregnancy. The physiological changes that occur during pregnancy can significantly impact the oral mucosa, making pregnant women more susceptible to certain oral diseases. These conditions can range from benign conditions such as pregnancy gingivitis to more serious issues like oral candidiasis or even oral manifestations of systemic diseases. Understanding the course and treatment of oral mucosal diseases in pregnant women is essential for healthcare providers to ensure both maternal and fetal well-being. This article delves into the most common oral mucosal diseases encountered during pregnancy, their clinical course, and effective treatment tactics that are safe for both mother and fetus.

During pregnancy, hormonal changes are among the most significant contributors to oral mucosal alterations. The increase in estrogen and progesterone levels can cause changes in the structure and function

of oral tissues, particularly the gums and mucosa. These changes can lead to inflammation and a higher incidence of gum diseases. One of the most common oral conditions during pregnancy is pregnancy gingivitis, which occurs in about 60-75% of pregnant women. This condition is characterized by redness, swelling, and bleeding of the gums, often aggravated by plaque accumulation. Pregnancy gingivitis typically starts in the second month of pregnancy and reaches its peak during the second trimester. The symptoms tend to subside after delivery, but if left untreated, pregnancy gingivitis can progress to more severe periodontal disease.

Another condition commonly observed in pregnant women is the formation of pregnancy tumors, also known as pyogenic granulomas. These benign, vascular lesions are typically found on the gingiva and are often associated with pregnancy-induced hormonal changes. Pyogenic granulomas appear as red, raised masses that bleed easily, and although they are non-cancerous,

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they can cause discomfort and bleeding. These tumors usually resolve postpartum, but in some cases, they may need to be surgically removed, particularly if they interfere with mastication or oral hygiene.

Pregnancy can also exacerbate the risk of oral candidiasis, a fungal infection caused by the overgrowth of Candida albicans in the oral cavity. Hormonal changes, along with a weakened immune response during pregnancy, can create an environment conducive to fungal overgrowth. Oral candidiasis typically presents as white, creamy lesions on the tongue, palate, and inner cheeks, which may be painful or associated with a burning sensation. In some cases, the infection may extend to the esophagus, leading to a condition known as esophageal candidiasis, which is more severe and can lead to swallowing difficulties. Pregnant women with diabetes or those who use inhaled corticosteroids are at increased risk of developing oral candidiasis.

Another condition that may affect the oral mucosa during pregnancy is herpes simplex virus (HSV) infection. HSV can manifest as painful lesions or sores on the lips, tongue, gums, and other areas of the mouth. While primary infections are often the most severe, reactivation of latent HSV during pregnancy is also common, particularly in the first trimester. Pregnant women who have a history of oral herpes may experience recurrent outbreaks, often triggered by stress, fever, or hormonal changes. The risk of transmission to the fetus is highest during active lesions at the time of delivery, which can result in neonatal herpes, a potentially life-threatening condition for the infant. One of the more serious oral manifestations during pregnancy is related to the autoimmune disorder known as pemphigoid gestationis. This rare condition presents as blistering lesions in the oral mucosa and can cause significant discomfort. Pemphigoid gestationis is typically diagnosed by biopsy and is associated with other symptoms like pruritus (itching) and erythema. Although it can be distressing, it usually resolves after delivery.

The treatment of oral mucosal diseases during pregnancy requires careful consideration to avoid any harm to the developing fetus. In general, the approach focuses on maintaining the health of both the mother and the fetus, managing symptoms, and preventing complications. The primary tactic in managing pregnancy-related oral mucosal diseases is prevention. Regular dental check-ups and good oral hygiene are essential for minimizing the risk of oral diseases. Pregnant women should be educated about the importance of brushing at least twice a day with fluoride toothpaste, flossing, and using a mouth rinse to reduce plaque buildup. Professional dental cleanings

are also recommended to remove tartar and plaque that may contribute to gum disease.

For conditions such as pregnancy gingivitis, the initial treatment involves improving oral hygiene through proper brushing and flossing, as well as frequent professional cleanings. In more severe cases, a dentist may recommend localized antimicrobial agents such as chlorhexidine mouthwash. However, systemic antibiotics should be avoided during pregnancy unless absolutely necessary, as they may pose risks to fetal development. Ensuring that women receive adequate nutrition during pregnancy, particularly vitamins C and D, is also crucial for gum health, as deficiencies in these nutrients can exacerbate gum disease.

In the case of pyogenic granulomas, treatment typically involves removal if the lesions are large, painful, or interfere with oral function. Surgical excision is the most common approach, although some cases may resolve spontaneously after childbirth. When surgery is required, it is typically performed under local anesthesia to minimize risks to the fetus. However, treatment is generally delayed until after delivery in cases where the lesion is not causing significant issues.

Oral candidiasis during pregnancy is managed with antifungal treatments that are considered safe for use during pregnancy. Topical antifungal agents, such as nystatin or clotrimazole, are preferred over oral antifungal drugs, as they are less likely to affect the fetus. In more severe cases, systemic antifungal therapy may be considered, but it should only be prescribed by a healthcare provider with careful evaluation of the potential risks and benefits. Pregnant women with diabetes are advised to keep their blood sugar levels in check, as hyperglycemia can increase the risk of fungal infections.

CONCLUSION

In conclusion, oral mucosal diseases are common during pregnancy due to hormonal changes and other physiological factors. Conditions such as pregnancy gingivitis, pyogenic granulomas, oral candidiasis, and herpes simplex virus infections can cause discomfort and potential complications. However, with early detection, proper oral care, and appropriate treatment, the majority of these conditions can be managed effectively. Pregnant women should be educated about the importance of maintaining oral health during pregnancy and encouraged to seek timely dental care to prevent and address oral mucosal diseases. The safety of both the mother and the fetus should always be prioritized, with a focus on non-invasive and pregnancy-safe treatments.

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