

Pregnancy Epulis: About a Case and Review of The Literature

Sofiane Kouas¹, Olfa Zoukar², Khoulood Ikridih³, Anis Haddad⁴

^{1,3}Mahdia Gynecology Service

^{2,4}Monastir Maternity Center

Abstract: *Pregnancy epulis constitutes a distinct clinical entity which can manifest in up to 5% of pregnant women in the form of a fleshy, dark red bleeding mass on contact at the level of the gingiva most often. This work, based on a case observed in our department and a review of the literature, aims to present the main clinical manifestations of pregnancy-related epulis and the management of this pathology, as well as its evolutionary potential.*

Keywords: epulis, pregnancy, gum, hormonal disturbances, fleshy mass, surgical abstention

1. Introduction

Pregnancy epulis is a benign hyperplastic tumor of the gingiva located at the level of the interproximal spaces of the maxillary incisors. Its etiology remains unknown, however, is thought to be due largely to a lack of oral hygiene and elevated progesterone levels, which explains its relative predilection in women during pregnancy and menstruation. The tumor has no degenerative potential and generally appears as a growth following chronic local irritation, or hormonal disturbances. Clinically, it presents as a fleshy dark red and richly vascularized mass, bleeding easily on contact. It also manifests as a well-circumscribed sessile or pedunculated mass. This tumor disappears spontaneously after childbirth or breastfeeding, since it is hormone-dependent. We report the case of a 35-year-old pregnant woman at 34 weeks' gestation who consulted for a tumor of the lower gingiva evolving for 2 months.

2. Observation

A 35-year-old woman with swollen hemorrhagic gingival tissue consulted our emergency room for assessment. She was in the 34th week of pregnancy. Apart from occasional social tobacco smoking, her history was unremarkable. Clinical examination revealed, at the level of the lower gum (Figure 1), a nodular, painless, exophytic, bright red raspberry-shaped mass, a few millimeters in size, firm, sessile with a broad base and bleeding on contact, without pain or suppuration. The patient was also found to have a bad oral state (dental plaques, tartar and halitosis) (Figure 2). The swelling was accompanied by areas of edema, erythema and hemorrhage. In addition, a sessile erythematous lesion was noted on the mandibular gingiva. The rest of the clinical examination was normal. A panoramic X-ray was carried out, but it was unremarkable. It should be noted that this lesion was progressive and increased in size over the last few months prior to presentation.



Figure 1: Epulis arising from the lower gum in a 7-month pregnant woman.



Figure 2: Poor oral condition with dental plaques.

The clinical and radiological data were very suggestive of the diagnosis of pregnancy epulis. Surgical excision with anatomopathological examination confirmed the diagnosis by showing a connective tissue, rich in collagen bands, not very cellular, richly vascularized, with hyperplastic vessels, with thickened walls. The healing was good and the patient was followed up for dental care.

3. Discussion

Pregnancy gingivitis is considered to be an acute form of gingivitis that occurs in up to 75% of pregnant women [1]. Pregnancy epulis constitutes a distinct clinical entity which can manifest in up to 5% of pregnant women [2].

Pregnancy epulis, or angiogranuloma, is a fleshy bud of bright red color and of soft consistency, appearing on the marginal gingiva of the pregnant woman, between the 4th and the 9th months. Its etiopathogenesis is not yet fully understood, but the role of hormonal factors seems essential. It is often located at the maxillary level, in the anterior maxillary region.

The diagnosis of pregnancy epulis is mainly based on clinical findings. The gingival changes associated with pregnancy have a high rate of postpartum resolution;

Additional examinations are not essential (sometimes a biopsy can be performed especially in case of diagnostic doubt)

Surgical abstention is the rule since this lesion is hormone-dependent and tends to disappear spontaneously within a few weeks, after childbirth or the end of breastfeeding. In some cases, surgical excision is necessary in case patient is too demanding, which understandable given the unsightly appearance of the pregnancy epulis, which is often at the front of the mouth, and its propensity to bleed, or in the event of a rapid and sudden increase in volume which interferes with normal speech and/or mastication. Practiced during pregnancy, pregnancy epulis excision carries a high risk of recurrence. On the anatomopathological level, its constitution is close to that of a fleshy bud or botryomycoma. The squamous epithelium is normal or is interrupted by a budding ulceration covered with a fibrino-leukocytic coating; the connective tissue is rich in neo-capillaries. The differential diagnosis is that of a pyogenic epulis, giant cell epulis, peripheral ossifying fibroma, hemangioma, Kaposi's sarcoma.

Treatment is based on the removal of the irritating factors. This can be achieved by the woman regularly visiting her dentist for thorough cleaning in addition to ensuring that her oral hygiene and care are of a high standard. Surgical abstention with surveillance is often recommended. Surgical excision is rarely indicated as it is often accompanied by recurrence.

4. Conclusion

Epulis is a benign hyperplastic tumor of the gingiva with no degenerative potential. Its etiology remains poorly understood; however, lack of oral hygiene and the increase in the progesterone level are thought to underlie its formation. The diagnosis is essentially clinical. Surgical abstention with surveillance is recommended because this lesion is hormone-dependent and tends to disappear after childbirth.

5. Conflicts of interest

The authors declare no conflict of interest.

6. Author Contributions

All the authors contributed to the conduct of this work. All authors also declare that they have read and approved the final version of the manuscript.

References

- [1] Barak S, Oettinger-Barak O, Oettinger M, Machtel E, Peled M, Ohel G. Common oral manifestations during pregnancy: a review. *Obstet Gynecol Surv* 2003;58:624–8.
- [2] Laine MA. Effect of pregnancy on periodontal and dental health. *Acta Odontol Scand* 2002; 60:257–64.