

# Periodontological Disease of Pregnancy: Pregnant Tumor

Serkan Bodur<sup>1</sup>, Erkan Özcan<sup>2</sup>, İsmet Gün<sup>3</sup>

<sup>1</sup>Mareşal Çakmak Asker Hastanesi, Kadın Hastalıkları ve Doğum Servisi, Erzurum

<sup>2</sup>Mareşal Çakmak Asker Hastanesi, Diş Hastalıkları Servisi, Erzurum

<sup>3</sup>GATA Haydarpaşa Eğitim Hastanesi, Kadın Hastalıkları ve Doğum Kliniği, İstanbul

## Abstract

**Objective:** Our aim was to discuss the treatment and management of pregnant tumor.

**Case:** The pregnant tumor is a periodontological disease similar the benign hyperplastic tumor of gingiva. It is seen in approximately 5 of the pregnant. A 26year old G1P0 patient was admitted to the Mount and Tooth Health Clinic with the complaints of swelling and bleeding in gingiva in the 18th pregnancy week. In oral examination, in the adherent gingiva in the region between right lower 1st and 2nd molar teeth was observed an exsophitic lesion in the diameter of about 4 cm. lesion was removed by the excisional biopsy and the diagnosis of the pyogenic granuloma was established.

**Conclusion:** There is no difference in histopathological features between pregnant tumor and pyogenic granuloma. Elevated hormone levels is one of the most important cause in the etiology. Treatment is generally expectant. Rarely, the surgery is necessary.

**Keywords:** Pregnancy, pregnancy tumor, pyogenic granuloma.

## Gebeliğin periodondolojik hastalığı: gingivanın hamilelik tümörü

**Amaç:** Gingivanın hamilelik tümörü tanısı koyduğumuz hastanın tedavi yönetimini vaka üzerinden tartışmaktır.

**Olgu:** Gingivanın hamilelik tümörü, gingivanın selim hiperplastik tümör benzeri periodontolojik bir hastalığıdır. Gebeliklerin yaklaşık 5'inde görülür. 26 yaşında G1P0 hasta 18. gebelik haftasında dişetinde şişlik ve kanama şikâyeti ile Ağız ve Diş Sağlığı Kliniğine başvurdu. Yapılan oral muayenede; sağ alt 1. ve 2. molar dişler arası bölgede yapışık dişetinde yaklaşık 4 cm çapında ekzofitik lezyon görüldü. Lezyon eksizyonel biopsi ile alındı ve piyojenik granülom tanısı konuldu.

**Sonuç:** Piyojenik granülom ile arasında histopatolojik düzeyde bir farklılık yoktur. Etiolojisinde, yükselmiş hormonal düzeyler en önemli nedendir. Tedavisinde nadiren cerrahiye gidilir. Gebelikte asıl yönetim ekspektan yaklaşımdır.

**Anahtar Sözcükler:** Gebelik, gingivanın hamilelik tümörü, piyojenik granülom.

## Introduction

The pregnant tumor which is a periodontological disease, is a lesion resembling the benign hyperplastic tumor of gingiva.<sup>1</sup> Apart from the fact that it occurred with the effects of hormonal changes during the pregnancy, in fact its difference in the histopathological level with pyogenic granuloma observed in males,

and the females who are not pregnant, was not demonstrated.<sup>2,3</sup> The greatest difference from pyogenic granuloma is to occur in response to the hormonal changes in pregnancy and to slow down itself within the several weeks after the hormonal changes eliminated together with the end of the pregnancy.<sup>4,5</sup> It is seen in approximately 5% of the pregnant and frequently

after the first trimester.<sup>6</sup> In its etiology, it has been demonstrated that elevated progesterone levels, local irritants and the bacteria have been effective.<sup>7</sup> Treatment is generally expectant. Rarely, the surgery is necessary.<sup>6</sup> As the recurrence risk after the surgery performed during the pregnancy is already high, it is not the preferable treatment.<sup>8,9</sup> Under the light of literature, we evaluated a case which we followed up with the pregnancy tumor diagnosis and which we applied the excisional surgery as the bleeding complication developed.

## Case

A 26-year old G1P0 patient was admitted to the Mount and Tooth Health Clinic with the complaints of swelling and bleeding in gingiva in the 18th pregnancy week. In oral examination, exsophitic lesion in the diameter of about 4 cm lying from interdental papilla to vestibular sulcus in the adherent gingiva in the region between right lower 1st and 2nd molar teeth was observed (Figure 1). Oral hygiene training was provided for the patient whose oral hygiene was not in a good condition. Tartars occurring the irritation around the lesion were

cleaned. Despite this process, lesion kept up with growing in the following two weeks. Spontaneous bleedings were realized to present in the patient expressing that speech and chewing functions were impaired. For this, by applying the oral surgical process to the patient within the 21st pregnancy week, lesion was removed by the excisional biopsy. After the pathological assessment, the diagnosis of the pyogenic granuloma was established. The recurrence was not detected in the patient observed by the periodical intervals during the pregnancy.

## Discussion

Even if they are the same lesions as pyogenic granulomas in the histopathological level, the etiology should be established as the definition of pregnancy tumor in the pregnant patients because they have displayed the specific differences as the biological behaviour character and the treatment regimen.<sup>5</sup> This condition is hyperplastic gingivitis and gingival hyperplasy occurring in pregnancy. For this reason, it is also known as the pregnancy gingivitis. It is benign. Its greatest difference from pyogenic granuloma is to be seen in pregnancy and to slow



**Figure 1.** A typical pregnancy tumor in view exsophitic lesion in the diameter of about 4 cm lying from interdental papilla to vestibular sulcus in the region between right lower 1st and 2nd molar teeth.

down spontaneously for a short time as a result of eliminating the hormonal changes after the delivery.<sup>4,5</sup> Even if it may be seen at any age, it is seen in generally young females at the age of reproduction and especially in the ones having bad hygiene. It is observed in approximately 5% of the pregnant and frequently after the first trimester.<sup>6</sup> In its etiology, it was demonstrated that elevated progesteron levels, local irritants and bacteria were effective.<sup>7</sup> In our case, the patient is 26 years old and is in the 18th pregnancy week. As seen in figure 1, the patient's oral hygiene is not in a good condition. It was reported as the pyogenic granuloma as a consequence of pathology examination.

Pyogenic granuloma is a tumor-like reactive inflammatory tissue reaction which occurs depending on the localised trauma and irritation. It is mostly seen in the individuals having bad oral hygiene. Because of the hormonal changes, this disease is seen in females more than the males. In fact, the name of pyogenic granuloma is wrong. Because lesion does not include granuloma and pus. Its surface is generally ulcerative. When peripheral ossified fibrom and peripheral giant cell granuloma occur on gingiva, two lessions are the same clinically as pyogenic granuloma. While pyogenic granuloma may occur in any place of the oral cavity, peripheral ossified fibrom or peripheral giant cell granuloma only occurs on gingiva or alveolar mucosa in oral cavity. Pyogenic granuloma commonly develops on buccal gingiva in interproximal tissue among the teeth. But the diagnosis, clinical picture and the treatment of these three clinical conditions are the same.

While the treatment regimen is scheduled, pregnancy must be in the foreground. In treatment, an expectant attitude is generally followed. But the fact that the lession bleeds and impairs the chewing functions and does not slow down after the pregnancy causes the indications for the surgical approach.<sup>6</sup> As the surgery performed during the pregnancy has a

higher reccurency risk, the surgery during the pregnancy is not preferable treatment approach.<sup>8,9</sup> But in the conditions which may complicate with the serious bleedings, the treatment method is really difficult in pregnancy. The treatment method in the patient group which the bleeding complication developed is identified by the intensity of the clinical picture. While mouth hygen, locally compression and the drugs stopping the local bleeding may be sufficient in the mild bleedings, the blood transfusion may even be neccessary in the severe bleedings. If the surgery is definitive, the treatment should be stopped within the second trimester of the pregnancy if possible and the patient should be observed in regular intervals.<sup>4</sup> In reccurency or in the group which the surgery can not performed and in the condition which the disease progressed increasingly, the pregnancy is ended that the lung maturation is provided.<sup>10</sup> In our case, the impairments of the patient's speech and chewing functions based on the mass were seen with the progression of the pregnancy week. Subsequently, as the bleedings started, the mass was completely removed by the surgical excision in the 21st pregnancy week. Oral hygiene training was provided for the patient during the pregnancy. And perhaps depending on this, the reccurency was not observed in a long run after the ending and ongoing pregnancy.

In general, prognosis is good. Although it is benign, it is customary for the mass to be removed for both diagnosis and treatment if the long period does not pass following the ending of the pregnancy. Although there is a possibility of reccurency in those which were removed during the pregnancy, there is no generally possibility of reccurency after ending the pregnancy if it is completely removed. And also, oral hygiene should be provided in order to reset the reccurency rate after such treatments. For this, the patient training is definitely essential by the physician. Soft tooth brushes and palatine massage must be definitely recommended.

## Conclusion

Consequently, the fact that pregnancy tumor, one of the diseases of the pregnancy period, having serious complications is known by the gynecologists is invaluable for the attention which should be given by assessing accurately the symptoms related to the mouth health of the patients. The importance of the oral hygiene and the usage of the soft tooth brushes must be taught all pregnant by the gynecologist physicians so that the development of the disease could be prevented rather than provided the treatment and the diagnosis of the disease.

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