

Dermatology Digest

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FIGURE 1
A lesion on
the gingiva

Did this young girl brush too vigorously?

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›CASE

A 16-year-old female presented with a painless lesion on her upper gingiva. She reported that about 4 weeks ago, her gums began to bleed while she was brushing her teeth. When she looked in her mouth, she noticed a small, fleshy, red “bump” between two of her front teeth. At first, the patient believed she had traumatized the gum from brushing too vigorously and made an effort to apply less toothbrush pressure to her gingiva. While brushing her teeth a few days ago, however, she noticed bleeding from the same area. When she examined the location more closely, she saw that the lesion was still present and appeared larger than it was when she originally noticed it. The patient denied any history of a similar lesion or of tobacco use and stated that she was otherwise healthy.

The physical examination revealed a small, firm, erythematous papule encompassing the gingiva between the central and lateral incisor (see Figure 1). There was no pain or tenderness on palpation, and the lesion was nonmobile with manipulation. An excisional biopsy was performed.

›WHAT IS THE MOST LIKELY DIAGNOSIS?

- *Fibroma*
- *Pyogenic granuloma*
- *Gingivitis*
- *Squamous cell carcinoma*

›DISCUSSION

The pathology revealed marked granulation tissue with inflammatory cell infiltrates and numerous capillaries. These findings are consistent with a pyogenic granuloma. Other terms that have been used to refer to this condition include *epulis gravidarum*, *sclerosing hemangioma*, *lobular capillary hemangioma*, and *pregnancy tumor* (because the lesions can occur during pregnancy as a result of hormonally primed and vascular gingiva).

Pyogenic granulomas are benign, can occur at any age, and typically arise from the interdental gingiva. They are believed to be stimulated by local irritation from food, trauma, dental restorations, or even tartar. They grow rapidly initially and then remain stagnant. Bleeding from the lesion is common. Treatment consists of excisional biopsy, and recurrence is rare.

When the origin of any lesion in the mouth is uncertain, incisional biopsy should be performed. The biopsy will help to rule out the conditions in the differential diagnosis, including rare malignancies such as amelanotic melanoma. This patient was seen again at 1 week after the lesion was removed and then again at 1 month, with no recurrence of the granuloma.

A fibroma is high on the differential in this case because its appearance and location are similar to those of pyogenic granuloma. However, fibromas tend to be firmer, lighter in color, and less friable when compared to pyogenic granuloma. Histology is used to differentiate the lesions.

Given the history of supposed trauma to the gum, the diagnosis of gingivitis can be considered. In this case, this diagnosis is unlikely since gingivitis is an inflammatory process, is more diffuse, and solitary lesions are atypical. In addition, patients with gingivitis usually have poor oral hygiene. Improvement in hygiene will resolve the condition.

Although oral squamous cell carcinoma is always a consideration, it is highly unlikely in this case given the appearance of the lesion, the age of the patient, and the lack of a smoking history. Oral carcinomas occur on the floor of the mouth and on the tongue but very rarely on the gingival tissue. Diagnosis and treatment consist of excision of the lesion and either radiation or chemotherapy, depending on the extent of disease. **JAAPA**

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