Case Report

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PYOGENIC GRANULOMA : ABOUT A CLINICAL OBSERVATION

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ABSTRACT:

Pyogenic granuloma is a soft tissue hypertrophy that develops as a result of minor injury or irritation. Both skin and mucous membranes can be affected. It is a common benign vascular tumour occurring in all ages. In the mouth, this lesion is most often seen on the gums of children and pregnant women. It is usually compressible, can be lobed and often pediculated. The diagnosis remains anatomopathological. We report a case of pyogenic granuloma in a well-functioning 28-year-old man with a gingival, pedicled vestibular budding tumor with spontaneous bleeding. She was excised with a scalpel blade followed by an anatomopathological examination, no recurrence was observed during the control sessions.

Keywords : Pyogenic granuloma, benign vascular tumours, Budding Tumor,

INTRODUCTION:

Pyogenic granuloma (PG) – also known as lobular capillary hemangioma - is a benign vascular tumour that occurs on the skin and mucous membranes, occasional it can be found subcutaneously or intravascularly. PG can arise spontaneously, in sites of injury, or within capillary malformations

Pyogenic granuloma is a benign vascular tumor that occurs on the skin and mucous membranes. It can provide of chronic irritation, trauma, or hormonal change during pregnancy.

In the oral cavity, it is most often involved in the gingival mucosa, more rarely the lingual, labial, palatal or the cheek mucosa. It usually affects both sexes, with a slight female predominance.

It is a pedicled lesion of soft consistency, bright red color and shiny surface with a clear hemorrhagic tendency, very often the lesion presents ulcers covered with fibrin. The diagnosis remains anatomopathological. [1-2-3-4-]

The objective of our work is to present this diagnostic approach through a clinical case.

CASE DETAIL:

A 28-year-old man, reported to the department of oral surgery with the complaint of an endobuccal mass at the level of the maxillary gingival area, in contrast to 11 and 21, in the buccal position, evolving since 6 months and slowly increasing volume, causing the patient an aesthetic discomfort. He is in good general health and does not complain of any pain.

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The intraoral examination reveals the presence of an ovoid-shaped vascularized bud sitting at the level of the interdental papilla of the two upper central incisors. The 1x0.7 cm mass is sessile, painless but bleeds on contact and has an inflammatory mucosa covering a more or less soft nodule on palpation (Fig 1a and b). We, also, noted that the patient has poor oral hygiene with the presence of plaque and tartar.

Provisional diagnosis of pyogenic granuloma (PG), granuloma with giant cells, Kaposi's sarcoma, bacillary angiomatosis, Non-Hodgkin's lymphoma, hemangioma were made

Treatment plan was formulated and after explaining it to the patient, his informed consent was taken. The treatment consisted of surgical excision of the lesion (Fig 2), the operative specimen was sent to the pathology laboratory. Histological analysis revealed a fleshy bud covered by an ulcerated squamous mucosa, characteristic of a pyogenic granuloma (Fig 3 a and b).

Fifteen days later, we saw the patient again and found total healing of the intervention site.

The patient presented for a follow-up examination two weeks postoperatively. The surgical site appeared to behealing well. There was no evidence of recurrence of the lesion, and the patient was asymptomatic. (Fig 4).

DISCUSSION:

Also known as botryomyoma, hyperplastic fat bud or lobulated capillary hemangioma, pyogenic granuloma (PG) is a benign lesion of vascular origin that has a pedunculated or sessile base and a smooth or lobulated surface. This tumor is found in all age groups in both children and adults, with a predominance in women in the second and third decade.[3-4-5] Often unique but sometimes multiple, it develops most frequently from ulceration, trauma, small wound, chronic irritation or secondary to care dental.[1-2-3-4-5-6-7] It may also be related to the hormonal changes of pregnant women, especially after the first trimester of pregnancy. It is considered a hormonally dependent lesion because of the high level of sex hormones (estrogen and progesterone). Indeed, these hormones stimulate the expression of angiogenic factors in inflammatory tissues. These factors, which play an important role in vascular morphogenesis, are found in significant quantities in pyogenic granulomas during pregnancy and in small quantities after delivery.[3-4-5] In present case, the patient is a man, in third decade of age.

The surface of the lesion is often ulcerated and its color varies from red to purple pink given its maturity. The young pyogenic granulomas are highly vascularized whereas the older lesions have more collagen and are therefore fibrous. The size of this tumor can vary from a few millimeters to several centimeters. It usually sits on the mucous membranes, especially on the lips, gums, cheeks and tongue. Our patient presents the mass on maxillary gingival area.

The differential diagnosis is often discussed with all hyperplastic lesions of the oral mucosa including like giant cell peripheral granuloma, Kaposi's sarcoma, bacillary angiomatosis, non-Hodgkin's lymphoma, hemangioma[1-2-3-4- 5]

Treatment consists of complete excision of the lesion with a scalpel blade followed by an anatomopathological examination. Several other treatments may be considered like CO2 laser excision, nitrogen cryosurgery, intralesional injection of corticosteroids or sclerosing agents.[3-4-6-7] The follow-up is simple and the prognosis is good. Recurrence after excision of a pyogenic granuloma can reach 16%. Angiogenic factors play an important role in their pathogenesis and in their recurrence. [1-2-5-7]

Microscopic examination revealed the presence of a mucosa coated with a thinned and well-differentiated, partly exulcerated, malpigian epithelium, as the present case reports. The chorion is the site of a benign vascular proliferation made of capillaries and lined with endothelial cells with regular ovoid nuclei. Some mitotic figures can also be noted ; the interstitial tissue comprises a polymorphous inflammatory infiltrate rich in neutrophils.

Follow-up was recommended at the end of 1 month / 3months / 6months which revealed a lack of recurrence.

CONCLUSION:

Pyogenic granuloma is sometimes a problem of diagnosis during the daily exercise of oral surgery because of its clinical presentation and variable etiological factors. Although it is a frequent lesion, the rapid development of PG, its sometimes large size and bleeding at the slightest touch often impresses the patient and sometimes even the practitioner.

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FIGURES:

Figure 1(a-b) : ovoid-shaped bud sitting at the level of the interdental papilla of the two upper central incisors

Figure 2: Immediate endobuccal post-opeartive view

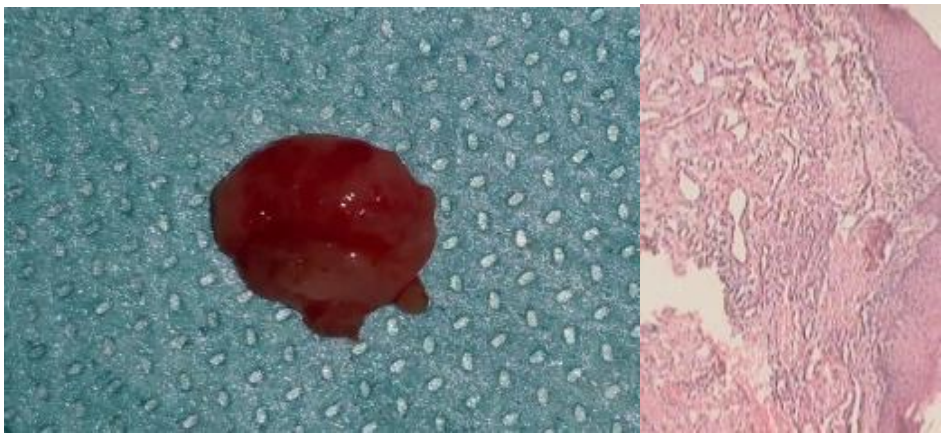

Figure 3: Macroscopic (a) and histological, (b) aspect of the lesion. fleshy bud covered by an ulcerated squamous mucosa (HE x 250) can be observed

Figure 4(a-b) : Endobuccal view : two weeks post-operative view