

## Management of Large Sized Pyogenic Granuloma over the Gingiva: A Case Report

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### Abstract

A 22-year old pregnant female patient in her third trimester, presented with an oral pyogenic granuloma that diagnosed through clinical and histopathological examination. Management with surgical excision done under local anesthesia.

**Keywords** Pyogenic granuloma; Pregnant; Tumor; Excision; Non-neoplastic; Surgical; Histopathological

### Introduction

One of the common oral finding in the soft tissue is Pyogenic Granuloma (PG), which is non-neoplastic, tumor-like growth [1]. It is most commonly occurs during puberty with more prevalence in female, with male to female ratio of 1:2. In the gingival region, PG counts for around two thirds of all the cases [2,3]. Some clinical features mainly present in this condition and the size of the lesion might vary from millimeters to several centimeters [4]. In pregnancy, it counts for almost 1%, mostly for females in the second decade of life [5]. In this report, a PG case in pregnant woman occurs over the gingiva will be dealing with, including the clinical and histological features, as well as the management of this case.

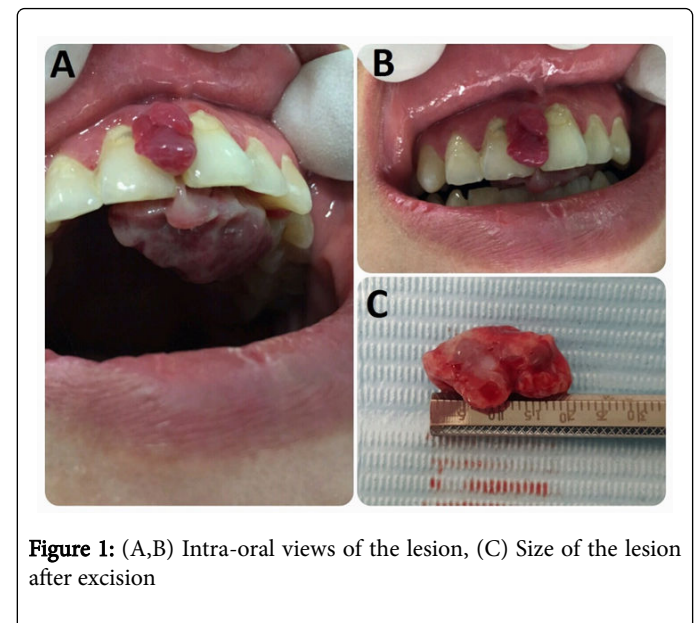
### Case Report

A 22-year old pregnant female patient in her third trimester, presented to the dental hospital at King Saud University in Riyadh, Saudi Arabia. The patient presented with heart shaped lesion in the upper anterior region palatal to the central incisors with a labial extension of the lesion (Figure 1). The lesion was asymptomatic but preventing oral hygiene procedures. The presented features lead to a provisional diagnosis of pyogenic granuloma. The lesion excised and the biopsy sent to the laboratory for histopathological examination for confirmation of the diagnosis. Upon pathological examination, the lesion shows an exophytic, ulcerated lesion characterized by lobulated proliferation of capillary sized vessels in a loose and edematous stroma. The surface epithelium attenuated and at the margin, elongated rete ridges form an epidermal collarette. The microscopic features confirmed the diagnosis of pyogenic granuloma. Informed consent obtained from the patient prior to the use of the intraoral photographs.

### Discussion

Pyogenic granuloma or pregnancy tumor has unknown etiology as described by previous studies, while others have related this condition to physical trauma or hormonal disturbances [6]. The presence of this

lesion in a female patient explains that pyogenic granuloma has a female predilection with 2:1 female to male [7]. The location of the lesion varies in the oral cavity; sometimes it appears in the gingiva, lips, tongue, and cheek [8].



**Figure 1:** (A,B) Intra-oral views of the lesion, (C) Size of the lesion after excision

This type of lesions exhibits a high recurrence rate, and it was suggested that the proper management of pregnancy tumor is the surgical excision of the entire lesion which results in the least recurrence rate [9]. The surgical excision was done under local anesthesia, and it was suggested that the use of local anesthesia during pregnancy does not lead to a teratogenic risks [10]. Proper oral hygiene will be prevented during the presence of such lesions, and patients should be instructed to maintain excellent oral hygiene methods during pregnancy [1].

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