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# PYOGENIC GRANULOMA IN A PATIENT WITH SEVERE PHONO-AUDIO-VISUAL DEFICIENCY

*Granuloma piogênico em paciente com deficiência fono-audiovisual severa*

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## Abstract

The pyogenic granuloma is a proliferative non-neoplastic lesion, common in the mouth and secondary to local irritative factors such as trauma and poor oral hygiene. Even though this lesion does not represent diagnosis and therapeutical problems in most of the cases, these objectives can become complex to be accomplished in disabled patients that demand special care. The aim of this report is to present a case of gingival PG in a patient with severe phono-audio-visual deficiency in which his disabled condition made the diagnosis harder to be defined and treatment not possible by local anesthesia.

**Keywords:** Pyogenic granuloma; Dental care for disabled; Oral surgery; Oral pathology.

## Resumo

O granuloma piogênico é uma lesão proliferativa, não-neoplásica, comum na boca e secundária a fatores irritativos locais, tais como trauma e higiene bucal pobre. Mesmo não representando problema diagnóstico e terapêutico na maioria dos casos, estes objetivos podem tornar-se complexos e difíceis de serem atingidos em pacientes que demandam cuidados especiais. O objetivo deste relato é apresentar um caso de granuloma piogênico gengival num paciente com deficiência fono-audiovisual, no qual a condição presente tornou o diagnóstico mais difícil e requereu indicação de tratamento cirúrgico sob anestesia geral.

**Palavras-chave:** Granuloma piogênico; Patologia bucal; Cirurgia bucal; Pacientes especiais.

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## INTRODUCTION

The pyogenic granuloma (PG) is a proliferative, non-neoplastic lesion, common in the oral cavity. It is characterized by an exuberant tissue response—with a varied inflammatory component; secondary to local irritative factors such as trauma and poor oral hygiene (1).

The treatment for PG consists of a subperiosteal excision of affected tissue associated with the irritative factors. Although this lesion does not present diagnosis and treatment problems in most cases diagnosis and treatment can be challenging in disabled patients requiring special care.

The aim of this report is to present a case of gingival PG in a patient with severe phono-audio-visual deficiency. His disability made the diagnosis more difficult and precluded the use of local anesthesia during treatment. Psychomotor aspects of the case are presented as predisposing factors for inadequate oral hygiene-related diseases such as PG.

## CASE REPORT

### Diagnosis

A 42 year-old male was referred by his sister for the evaluation of a round lesion in his

oral cavity. The patient had been refused by several institutions because of the inability to communicate with him. He presented with a congenital audio-visual deficiency and he was unable to speak due to hearing disability.

During the extraoral inspection the patient was unable to close the lips due to size of the lesion. The oral examination revealed a large pinkish-red lesion with erythematous spots located in the anterior region of the maxilla. (Figure 1).



FIGURE 1 - Absence of lip sealing promoted by the growth of the lesion

Panoramic radiography showed no bone alteration caused by the lesion, but there was generalized alveolar bone loss consistent with severe periodontal disease (Figure 2). The primary tentative diagnosis was PG.



FIGURE 2 - Image shows no bone alteration caused by the lesion. Generalized alveolar bone loss

## Treatment

The removal of the lesion as well as the dental extractions were done under general anesthesia for patient management reasons. The lesion presented as a pediculated node located in the papilla between the superior central incisors (Figure 3). It and the underlying periosteum were removed in order to minimize the chance of lesion recurrence. Residual root fragments and periodontally compromised teeth were extracted while the remaining teeth were properly cleaned while the patient was still under general anesthesia.

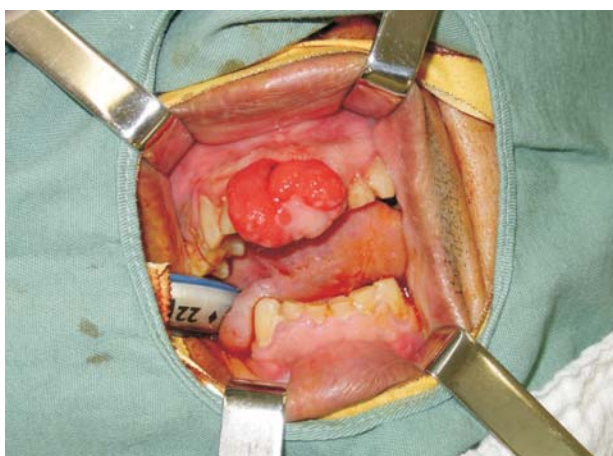


FIGURE 3 - Clinical aspect of the lesion, suggesting a PG

A histological examination of the lesion confirmed the diagnosis of PG. Following the surgery the patient was referred to a specialized center for dental care of disabled patients to facilitate the maintenance of his oral condition.

## DISCUSSION

The maintenance of oral care in patients requiring special needs represent a continuous challenge for the family and for the dental professionals. Although hearing and visual deficiency do not directly affect oral health, the association of both without proper medical-dental and psychological conditioning in early childhood may predispose the patient to several oral diseases due to the acquired psychomotor inabilities (2-8). Another factor in this complex process is the non-development of speech due to deafness which further complicates the learning of alternative communication strategies.

Patients with phono-audio-visual impairment develop psychomotor problems that affect their ability to maintain a favorable level of oral hygiene that leads to diseases varying from dental caries to reactive proliferative conditions such as PG (1, 2, 6, 7). This reinforces the need for follow-up in a multidisciplinary institution with active participation of the dentist to educate the family on oral health issues and to provide curative and preventive control of these patients. Without this the professional is faced with difficult scenarios such as the present case because the patient had received proper care in the past leaving his family unable to maintain his oral health.

Many patients with similar disabilities are able to receive dental care on an out-patient basis without the need for sedation or general anesthesia, since previous professional conditioning has occurred early in their lives.(7). General anesthesia was used in the present case to provide absolute control of patient movements to facilitate the successful removal of the lesion while minimizing the chance of recurrence. This approach also made it possible to remove the residual dental root fragments and periodontally involved teeth at the same time. Although sedation is also an option, general anesthesia was chosen because of the security in maintenance of airways.

## CONCLUSION

Patients with phono-audio-visual deficiency need multidisciplinary treatment and follow-up. The importance of the dentist in the prevention and treatment of oral disease in patients with disabilities should not be overlooked in their overall health and quality of life.

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