

# Necrotizing Sialometaplasia: Importance of Differential Diagnosis Versus Malignancy

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## ABSTRACT

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## Introduction

Necrotizing sialometaplasia (NSM) is a benign inflammatory entity that mainly affects minor salivary glands. The most accepted hypothesis about its origin is that external traumatic factors (mechanical, chemical, radiotherapeutic, etc.) produce vascular damage that triggers ischemia of the salivary glands, leading to tissue necrosis [1]. Clinically it generally consists of rapid onset ulcer, with irregular indurated edges, necrotic component, with malignant appearance (Figure 1). Its course is self-limited, healing in most cases without sequelae in a few weeks. Hence the importance of its differential diagnosis with malignant entities, whose treatment would be surgical, usually highly aggressive [2]. Its most frequent location is the oral cavity (mainly hard palate) but cases have also been described in other locations of head and

neck [1]. The etiological factors described range from tobacco, to bulimia, alcohol or dental alterations among others [3].

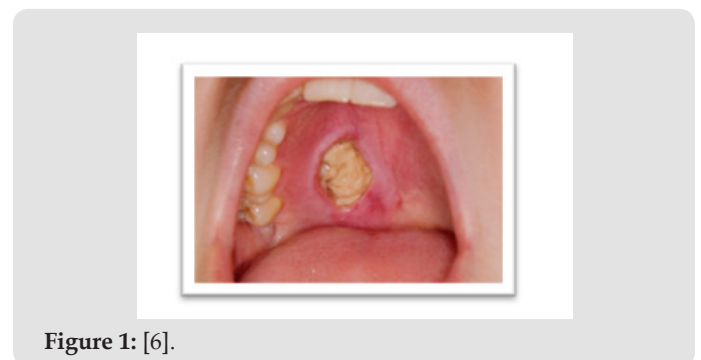


Figure 1: [6].

## Case Report

A 24-year-old female patient was seen in our department after coming to the emergency department for a painless lesion in soft palate of three weeks of evolution.

### Physical Examination

A 1.5 centimeters of diameter ulcer in the soft palate was observed, with a friable consistency and crateriform appearance whose bottom reached the underlying bone. No cervical lymphadenopathies were observed.

### Previous Medical History

Toxic habits included alcohol and occasional smoking, among his pathologic antecedents of interest, a keloid scar in the right auricle. As usual medication she was taking Fluoxetine and was carrying a hormonal contraceptive implant. Due to a malignant process suspicion, an incisional biopsy was performed for anatomopathological study, and samples were also sent for microbiological culture. To complete locoregional and distant extension study, a facial, cervical and thoracic CT scan was requested.

## Results

### Imaging Tests

The ulcerative image described in the left hemipalate was not clearly visible by CT. There were also no pathologic lymphadenopathies or clear signs of cervico-thoracic extension.

### Microbiological Cultures

Were negative for microorganisms of pathological significance.

### Pathological Analysis:

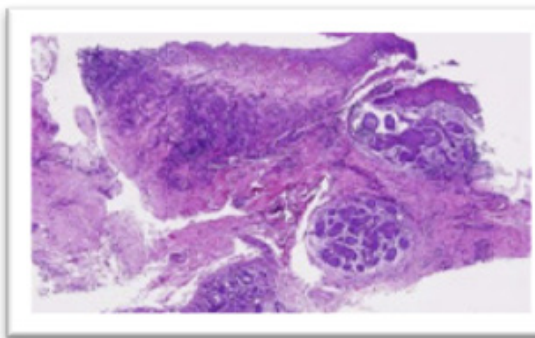


Figure 2: [7].

The study could not rule out malignancy, due to diagnostic doubts, it was decided to contact an external center for detailed assessment and second opinion. The microscopic report finally

described a pseudo-epitheliomatous squamous hyperplasia with reactive atypia. In depth, a salivary gland with preserved lobular arrangement and marked squamous metaplasia was appreciated (Figures 2 & 3).

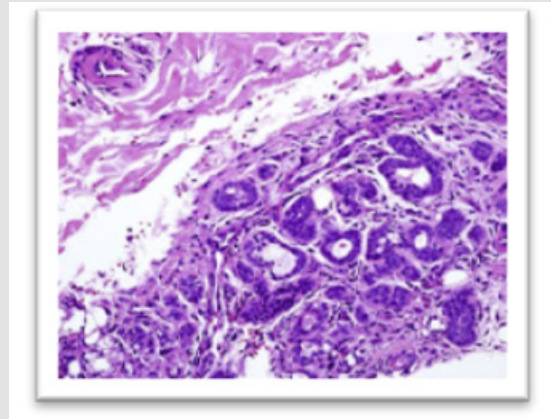


Figure 3: [7].

### Follow-Up

The lesion regressed spontaneously and resolved without sequelae approximately 4 months later.

Finally, it was concluded that the histological alterations were compatible with Necrotizing Sialometaplasia, a pathology that fitted with the epidemiological and clinical context of the patient, due to her age, risk factors and spontaneous resolution.

## Conclusion

SMN is a benign entity whose relevance lies in its clinical and anatomopathologic mimicry with other malignant pathologies. Because the borderline between SMN and malignancy is very blurred, the detailed anatomopathological study will be indicative, being key a close follow-up to verify the spontaneous regression of the lesion, which in case of not occurring, will tip the balance towards a malignant process [4]. Recurrences are not frequent, but SMN indicates an aggression to the oral mucosa. The triggering factor should be suppressed to facilitate regression of the lesion and avoid its evolution to other pathologies with a worse prognosis, especially tobacco and alcohol, the main risk factors for head and neck cancer [5-7].

## References

1. Sneige N, Batsakis JG (1992) Pathology Consultation: Necrotizing Sialometaplasia. *Ann Otol Rhinol Laryngol* 101: 1992.
2. Gohel A, Villa A, Sakai O (2016) Benign Jaw Lesions. *Dent Clin N Am* 60(1): 125-141.
3. Rushinek H, Keshet N, Alex Maly, Doron J Aframian (2016) Necrotizing sialometaplasia relates to vomiting and silastic ring vertical gastroplasty. *Quintessence Int* 47(2): 147-150.

4. Gutierrez Domingo A, Pilar Toledano Valero, Erika Olmos Juárez (2020) Sialometaplasia necrotizante: una entidad simuladora. Rev Esp Cir Oral Maxilofac 42(4): 182-184.
5. Zhurakivska K, Maiorano E, Nocini R, Michele D Mignogna, Gianfranco Favia, et al. (2019) Necrotizing sialometaplasia can hide the presence of salivary gland tumors: A case series. Oral Dis 25: 1084-1090.
6. Wilder EG, Frieder J, Sulhan S, PabloMichel, Jeffrey D Cizenski, et al. (2017) Spectrum of orocutaneous disease associations. Academy of Dermatology 77(5): 809-830.
7. Wu YH, Kuo YS, Lin PY, Chun Pin Chiang (2020) Necrotizing Sialometaplasia: Case Report. Journal of Dental Sciences 15(3): 390-392.

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