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Necrotizing sialometaplasia — Case report



KEYWORDS

Hard palate; Necrotizing sialometaplasia; Mucous gland; Salivary gland

The necrotizing sialometaplasia is a relatively rare destructive and inflammatory lesion of the salivary glands. It most frequently develops in the minor mucous glands of the posterior hard palate. This report presented a case of necrotizing sialometaplasia at the left posterior hard palate of a middle-aged male patient.

This 48-year-old male patient came to our oral mucosal disease clinic for treatment of a slightly painful and unhealed lesion at the left posterior hard palate for more than two weeks. Intraoral examination revealed an erythematous and ulcerative lesion measuring about 1.4×1.2 cm at the left posterior hard palate (Fig. 1A). The patient had the past medical history of cardiovascular disease with implementation of two stents in the coronary arteries before, and thus he took aspirin regularly to prevent from blood vessel thrombosis. Because of the suspicion of a dysplastic or a malignant lesion, the patient was referred to oral surgeon for biopsy. The incisional biopsy of the lesion was performed under local anesthesia. The specimen was sent for histopathological examination. Microscopically, it showed surface ulceration, necrosis of the lamina propria connective tissue, migration and growth of atypical stratified squamous epithelium onto the fibrinoid materials in the necrotic lamina propria area, and a severe lymphoplasma cell infiltrate in the submucosal tissue (Fig. 1B and C). The submucosal minor mucous glands exhibited atrophy of acinar structures and squamous metaplasia of the residual salivary ducts resulting in formation of groups of squamous epithelial nests in the submucosal tissue (Fig. 1D, E, and F). Therefore, the histopathological diagnosis of necrotizing sialometaplasia was confirmed.

The necrotizing sialometaplasia is a lesion that mimics a malignant process, both clinically and microscopically.¹ Clinically, the necrotizing sialometaplasia always presents as an unhealed ulcerative lesion for more than 2 weeks. Microscopically, the necrotizing sialometaplasia usually shows squamous metaplasia of the salivary ducts and pseudoepitheliomatous hyperplasia of the overlying surface epithelium. Thus, the squamous epithelial nests in the subepithelial connective tissue are sometimes misdiagnosed as squamous cell carcinoma or mucoepidermoid carcinoma. However, these squamous epithelial nests often show a bland cytologic appearance without dysplastic features. In addition, the lobular structure of the involved salivary glands is still preserved. These are useful histopathologic clues to confirm the diagnosis of necrotizing sialometaplasia. The diagnosis of necrotizing sialometaplasia usually does not need immunohistochemical staining to identify the cell types or origin of the tumor cells.²⁻⁵ However, if needed, the immunostaining may be performed, and the low immunoreactivity for Ki-67 antigen or p53 protein can rule out the diagnosis of a squamous cell carcinoma or a mucoepidermoid carcinoma.¹

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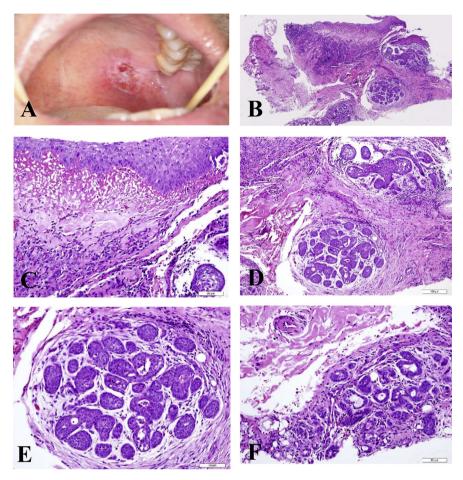


Figure 1 Clinical and histological photographs of our case of necrotizing sialometaplasia. (A) Clinical photograph showing a red and ulcerative lesion at the left posterior hard palate. (B and C) Microphotographs of palatal mucosa exhibiting surface ulceration, necrosis of the lamina propria connective tissue, migration and growth of atypical stratified squamous epithelium onto the fibrinoid materials in the necrotic lamina propria area, and a severe lymphoplasma cell infiltrate in the submucosal tissue (Hematoxylin and eosin stain; original magnification; B, $4 \times$ and C, $20 \times$). (D, E and F) Microphotographs of submucosal minor mucous glands demonstrating atrophy of acinar structures and squamous metaplasia of the residual salivary ducts resulting in formation of groups of squamous epithelial nests in the submucosal tissue (Hematoxylin and eosin stain; original magnification; D, $10 \times$; E and F, $20 \times$).

Declaration of Competing Interest

The authors have no conflicts of interest relevant to this article.

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