Myoepithelioma of the Palate: A Case Report

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This case report is available in Journal of Dentistry Indonesia: https://scholarhub.ui.ac.id/jdi/vol24/iss3/7
CASE REPORT

Myoepithelioma of the Palate: A Case Report

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ABSTRACT

Myoepithelioma, a benign tumor, occurs with a frequency of 1.5% among all salivary gland tumors, and it most commonly affects the parotid gland. Nearly the entire epithelium is composed of neoplastic myoepithelial cells exhibiting spindle, plasmacytic, epithelial-like, and clear cells. Case Report: A 52-year-old woman with myoepithelioma of the palate. The patient was referred to our hospital with a chief complaint of swelling on the right side of the palate. Following clinical and intraoral examinations, the tumor was removed under general anesthesia. Viewed microscopically, the tumor was seen to be surrounded by a fibrous membrane, primarily composed of a solid growth of neoplastic myoepithelial cells, virtually surrounding a hyaline-like eosinophilic substance. Immunohistochemical examination revealed strongly-positive reactions by the tumor cells for wide-spectrum cytokeratin (CK wide), vimentin, and S-100 proteins. CK 7, smooth muscle actin (SMA), p63, and glial fibrillary acidic protein (GFAP) gave weakly-positive reactions. Conclusion: Based on the findings, a pathological diagnosis of myoepithelioma was reached.

Keywords: myoepithelioma, palate, salivary gland tumor

INTRODUCTION

Myoepithelioma is a benign epithelial tumor arising from the salivary gland. It occurs with a frequency of 1.5% among all salivary gland tumors, with a predilection for the parotid gland. Histologically, this tumor is characterized by the proliferation of neoplastic myoepithelial cells exhibiting spindle, plasmacytic, epithelial-like, and clear cells. Herein, we present a case of myoepithelioma in the palate, along with a description of the histopathological findings.

CASE REPORT

A 52-year-old woman was referred to our outpatient department with a chief complaint of swelling on the right side of the palate. She had noticed a painless but gradually-growing swelling on the palate approximately eight months earlier. Past medical history revealed that she had undergone a treatment on the endometrium. There was no documentation of her medical condition. An intra-oral clinical examination revealed the presence of a well-circumscribed swelling, measuring 10 mm, on the right side of the palate in the oral cavity. It was covered by healthy-looking oral mucosa (Figure 1), and felt elastic hard on palpation indicative of a benign tumor. Neither X-ray nor computed tomography (CT) examinations demonstrated any obvious abnormal findings in the bone in the palatal region.

The surgical margin was determined to be at 2 mm surrounding the tumor, which was excised under general anesthesia. Viewed microscopically, a fibrous membrane was seen surrounding the tumor (Fig. 2a). Histopathologically, a solid growth of spindle cells and plasmacytic cells was determined to be the main component of the membrane, virtually surrounding a hyaline-like eosinophilic substance (Figure 2b). No
nuclear or cytological atypia, features of malignancy, were detected. In addition, no mucous component was detected following staining with periodic acid-Schiff (PAS) and mucicarmine. Immunohistochemical staining was carried out using the following primary antibodies: anti-human wide-spectrum cytokeratin (CK wide; DAKO; 1:4000 dilution), anti-human vimentin (DAKO; 1:50 dilution), anti-human S-100 (DAKO; 1:4000 dilution), anti-human CK 7 (DAKO; 1:50 dilution), anti-smooth muscle actin (SMA) (DAKO; 1:100 dilution), anti-human p63 (DAKO; 1:800 dilution), and anti-human glial fibrillary acidic protein (GFAP) (DAKO; 1:1000 dilution). Immunohistochemical studies revealed strongly-positive reactions by the tumor cells for CK wide (Figure 3a), vimentin (Figure 3b), and S-100 (Figure 3c). Weakly-positive reactions were observed for CK 7 (Figure 3d), SMA, and p63, and staining for GFAP was faintly positive. Taken together, these findings led us to diagnose the tumor as a myoepithelioma.

DISCUSSION

The prevalence of myoepithelioma is 1.5% among all salivary gland tumors, and it most commonly affects the parotid gland. Nearly the entire epithelium is composed of neoplastic myoepithelial cells exhibiting spindle, plasmacytic, epithelial-like, and clear cells. Myoepitheliomas arising from parotid and palatal glands generally present with spindle cells and plasmacytic cells, respectively. In the present case, the tumor consisted of a mix of spindle and plasmacytic cells in the palatal region. Normally, myoepithelial cells demonstrate positive immunoreactions for CK wide, vimentin, S-100, and GFAP, and neoplastic myoepithelial cells show positive staining for SMA and p63. The immunohistochemical results in the present case were consistent with those normally seen in neoplastic myoepithelial cells. The differential diagnosis of myoepithelioma from pleomorphic adenoma is often subtle, since the presence of neoplastic myoepithelial cells is a common histological feature of pleomorphic adenoma. Pleomorphic adenoma shows myxomatous and/or chondroid stroma, with a mixed appearance however, none of these characteristics was observed in the present case. The tumors are usually surrounded by an unclear fibrous capsule arising from a minor salivary gland, and are generally linked to malignant transformation. The myoepithelioma carries a benign prognosis and rarely transforms into malignancy. However, the incidence of malignant transformation may be higher in myoepithelioma than in pleomorphic adenoma, making it crucial to distinguish between the two conditions.

CONCLUSION

In conclusion, this report presents a case of myoepithelioma in the oral palate, diagnosed based on the histopathological findings.
CONFLICT OF INTEREST

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

REFERENCES

(Received July 30, 2017; October 23, 2017)