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PLEOMORPHIC ADENOMA OF THE SOFT PALATE – A CASE REPORT

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Summary

A case of a minor salivary gland tumor of the soft palate in a 64-year-old female patient is reported. Fine-needle aspiration cytology diagnosed pleomorphic adenoma. Transoral extirpation was done. Histological examination confirmed cytological diagnosis. There is no recurrence after 4 years of follow-up.

Tumors of the salivary glands constitute about 3% of all tumors. Most of them arise in the major glands. Tumors localized in the minor glands are more often malignant. Pleomorphic adenoma constitutes 10% of minor salivary gland tumors.

Diagnosis of intraoral tumors includes diagnostic imaging as well as fine-needle aspiration cytology. Preoperative work up influences surgical approach.

KEY WORDS: *pleomorphic adenoma, soft palate salivary glands, transoral approach*

PLEOMORFNI ADENOM MEKOG NEPCA – PRIKAZ SLUČAJA

Sažetak

Prikazana je bolesnica s tumorom male žlijezde slinovnice mekog nepca. Citološki se radilo o pleomorfnom adenomu. Učinjena je transoralna ekstirpacija. Patohistološka dijagnoza potvrdila je citološki nalaz. Na redovitim kontrolama bolesnica je više od 4 godine bez recidivnog tumora.

Tumori žlijezda slinovnica čine oko 3% svih lokalizacija tumora. Češći su tumori velikih žlijezda slinovnica, tumori lokalizirani u malim žlijezdama slinovnicama češće su maligni. Pleomorfni adenomi čine 10% tumora malih žlijezda slinovnica.

Dijagnostička obrada intraoralnih tumora uključuje metode vizualizacije tumora, kao i aspiracijsku citodijagnostiku. Rezultati učinjenih pretraga utječu na odluku o kirurškom pristupu.

KLJUČNE RIJEČI: *pleomorfni adenom, male žlijezde slinovnice mekog nepca, transoralni pristup*

INTRODUCTION

Tumors of the salivary glands constitute about 3% of all tumors and are characterized by variability in structure, clinical presentation and behavior. The salivary glands are divided into major (paired parotid, submandibular and sublingual glands) and minor salivary gland categories (600 to 1000 glands distributed throughout the upper aerodigestive tract). Up to 95 % of salivary gland tumors arise in the major glands. Tumors localized in the minor salivary glands are more often malignant, with benign to malignant ratio being 1 to 4. Pleomorphic adenoma consti-

tutes 10% of minor salivary gland tumors (1). About 100 of the minor salivary glands located in the soft palate are predominantly mucous glands (2). The most common intraoral localization of tumor is the palate, followed by the upper lip and buccal mucosa (3).

Salivary gland tumor in the oral cavity can be identified as a painless firm mass and if it is not recognized at an early stage, it is identified when its size impairs speech, swallowing or breathing. Pleomorphic adenoma in most cases does not cause ulceration of the overlying mucosa (3).

For tumors clinically presented as swelling in the soft palate, it is important to distinguish do they originate from the soft palate, deep lobe of the parotid gland or from the parapharyngeal space. In diagnostic procedure, it is often necessary to perform CT or MRI in order to choose the best surgical approach (4).

For smaller tumors localized in the soft palate, transoral extirpation is recommended. Radical surgery is obligatory because inadequate resection leads to local recurrence.

CASE REPORT

A case of pleomorphic adenoma in the minor salivary gland of the soft palate in a 64-year-old female patient is reported. According to available literature, it is a rare localization of benign salivary gland tumor.

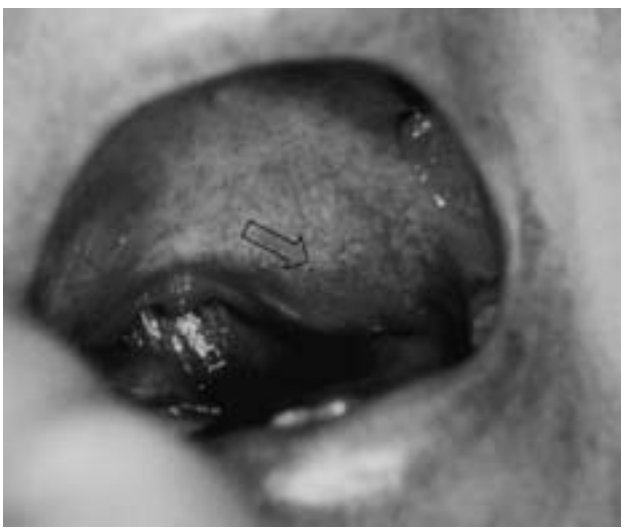

Figure 1. Clinical presentation of the tumor.

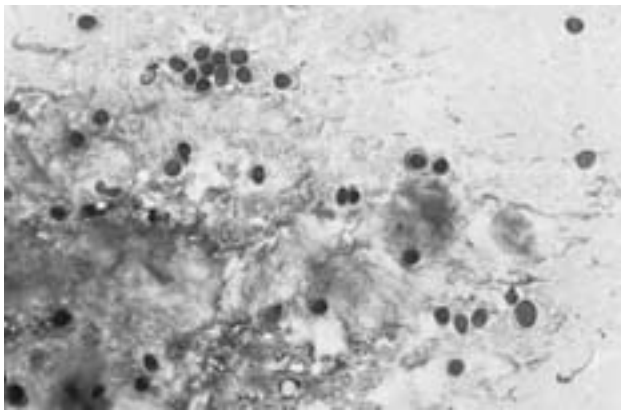

Figure 2. Fine needle aspiration cytology. MGG staining.

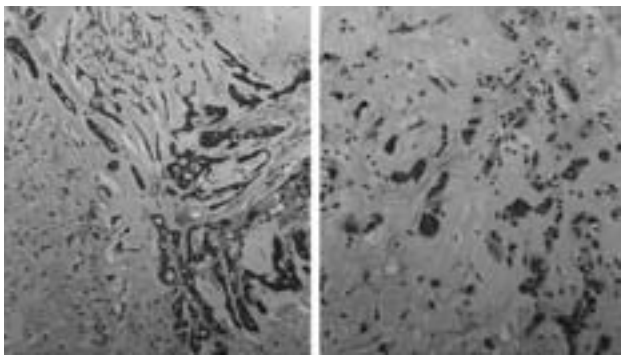

Figure 3. Pleomorphic adenoma. H&E staining.

The patient was admitted because of a lump in the left half of the soft palate, she was free of symptoms and noticed the lump few days before in the mirror. On clinical examination, there was a bluish round mass approximately 2 cm in size localized under the intact mucosa of the left half of the soft palate (Figure 1). Diagnostic procedure included fine-needle aspiration cytology and preoperative examination required general anesthesia.

Fine-needle aspiration cytology diagnosed pleomorphic adenoma. The aspirate was thick and gelatinous in consistency. The smear was MGG-stained. On microscopic examination, it showed intensively red to dark purple, fibrilar mesenchymal fragments. There were rounded, monomorphous epithelial cells with well-defined, sometimes eccentric cytoplasm together with spindle-shaped myoepithelial cells (Figure 2).

Transoral extirpation was done.

Histological examination confirmed cytological diagnosis. Histologically, the tumor had

Figure 4. Postoperative intraoral view.

closely associated epithelial elements resembling ductal cells or myoepithelial cells arranged in duct formations, acini, irregular tubules and strands of cells. These elements were typically dispersed within myxochondroid stroma. In this case, there was no epithelial dysplasia or evident mitotic activity (Figure 3).

Postoperative period was uneventful.

There is no recurrence after 4 years of follow-up (Figure 4).

DISSCUSION

Soft palate lesions present a diagnostic challenge because of possible morphological variety as well as several surgical approaches. Preoperative imaging is often necessary for precise localization of lesions clinically presented as swelling in the soft palate. Differential diagnosis includes tumors located in the soft palate, tumors of the deep lobe of the parotid gland and tumors of the parapharyngeal space. The most important information is whether or not the parapharyngeal space fat can be seen between the deep portion of the parotid gland and the parapharyngeal mass. If fat is visualized on all axial CT scans, the lesion is most probably of non-parotid origin (5). Magnetic resonance imaging achieves higher soft tissue differentiation and carotid arteries can be more reliably identified (6). Schwannomas displace the internal carotid artery anteriorly whereas extraparotid salivary gland tumors displace the great vessels posteriorly. The combination of clinical and imaging information can achieve a pre-operative diagnosis in 90 to 95 % of patients (5).

Fine-needle aspiration cytology is very helpful. Lesions of the soft palate are easily approached transorally and the major problem is recognizing the morphological variety of rare lesions. In our case, clinical presentation and fine-needle aspiration cytology were enough for surgical procedure planning.

The size and location of the tumor as well as degree of suspicion of malignancy should influence the choice of surgical approach (2). Surgical exposure should enable total tumor extirpation with the least morbidity and possibility for tumor recurrence (4). There are several possible complications of surgical procedure in the soft palate: food regurgitation, nasal speech, dry mouth or impaired taste.

Since pleomorphic adenomas have pseudopod extensions, they tend to recur, and therefore the treatment of choice should include a wide excision and not only enucleation (7).

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