

Two Different Giant Pleomorphic Adenoma Arising from the Palate and Parapharyngeal Space

Damak ve Parafarengial Bölgeden Kaynaklanan Farklı İki Dev Pleomorfik Adenom Olgusu

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Geliş Tarihi / Received: 11.09.2013

Kabul Tarihi / Accepted: 06.11.2013

ABSTRACT

Pleomorphic adenoma is the most common of minor salivary gland tumors. Pleomorphic adenoma of minor salivary glands are commonly located on the palate nevertheless rarely may originate from the parapharyngeal region. Pleomorphic adenomas on the palate show slow growth over the years. The tumors that originate from the parapharyngeal region could reach great dimensions. In this case report, an orphan and neglected geriatric patient who had giant pleomorphic adenoma on the palate and a young patient with a giant pleomorphic adenoma that was excised by transcervical approach without additional surgical procedures at the parapharyngeal region, were presented.

Keywords: Pleomorphic adenoma; minor salivary gland; palate; parapharyngeal space.

ÖZET

Minör tükürük bezi kaynaklı tümörler arasında en sık görülen pleomorfik adenomdur. Minör tükürük bezi kaynaklı pleomorfik adenom en sık damakta görülüp, parafarengial bölgede nadiren karşımıza çıkar. Damak pleomorfik adenomları yıllar içinde yavaş büyüme gösterirler. Parafarengial bölgeden kaynaklananlar büyük boyutlara ulaşabilirler. Bu makalede kimsesiz ve bakımsız kalmış geriatric bir hastada damak bölgesinde yerleşik oldukça büyük boyutlara gelmiş pleomorfik adenom olgusu ile genç bir hastada yine oldukça büyük boyutlara ulaşmış ve ek cerrahi prosedüre ihtiyaç kalmadan transservikal yaklaşımla çıkartılmış pleomorfik adenom olgusu sunuldu.

Anahtar Kelimeler: Pleomorfik adenom; minör tükürük bezi; sert damak; parafarengial bölge.

INTRODUCTION

Salivary glands are commonly divided into two groups as major and minor. Although minor salivary glands exist at the plate with the highest rate, a substantial amount are located throughout the upper respiratory-digestive tract submucosal layer (1). Salivary gland tumors constitute 3 % of all head and neck tumors (2). The tumors originating from the minor salivary gland rare cases and constitute only 10 to 25 % of all salivary gland tumors. Pleomorphic adenoma (PA) (or benign mixt tumor) is the most common minor salivary gland tumor and approximately constitute the 65 % of all salivary gland tumors, the 40 % of minor salivary gland tumors. It can be seen at the palate and parapharyngeal region, as it may occur in the nasal cavity, paranasal sinuses

and larynx. Most of the patients with PA that originate from minor salivary glands are between ages 40-60 years and a slight female dominance has been detected (1). PA is mixed tumor including both epithelial and mesodermal elements. The epithelial cell islets and cords are available in the myxoid stroma. PA has a thin and incomplete capsule and extensions termed pseudopods. Pseudopods are considered to be responsible for the postoperative recurrence. If the capsule is torn or an insufficient resection size is done during the operation, a residual tissue or implantation may occur (3). In this study, two cases were presented. One of them, a homeless and neglected geriatric patient was brought to our clinic by the home care service stuff, who had giant pleomorphic adenoma on his palate and other one, a young patient with a giant pleomorphic adenoma at the parapharyngeal region.

CASE PRESENTATION- 1

Seventy-eight-year-old male patient was brought to the clinic by home care service staff. The detailed anamnesis from patient was not possible due to massive dementia and no accessible collateral kin. The main complaints of nursing home practitioners were spoilt of speech fluency, feeding difficulty and snoring and a giant mass in-mouth. On the physical examination, immobile, non-pulsatile, painless mass, covered with broken mucosa, medium-hard in consistency, with an approximately 6x4x3 cm in size, was detected on right paramedian location in hard-plate

(Figure I). There was no lymphadenopathy in the neck. At the computerized tomography (CT) scanning, solid mass which was depleting to palatine bone but not invading was detected. Following, the mass was removed en bloc with the hard palate periosteum by intraoral approach. The patient's definitive pathological result was reported as PA. At the early postoperative period, the complaints related to mass disappeared. The wound healing was completed at the end of a month. There was no recurrence for three months. But, the patient died a cardiovascular disorder in the postoperative fourth month.

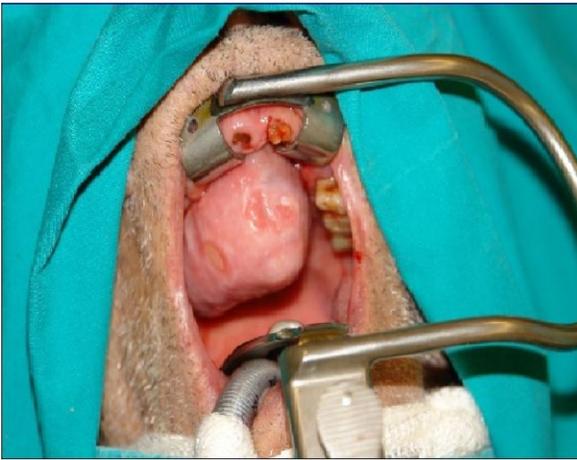


Figure I: Giant pleomorphic adenoma in the hard-plate.



Figure III: Heterogeneous hypodense solid mass at the T1 weighted magnetic resonance imaging.



Figure II: Giant pleomorphic adenoma in the left parapharyngeal region.

CASE PRESENTATION- 2

Twenty-nine-year-old male patient was referred to our clinic with gradual increasing complaints in the throat for a year, such as painless swelling, dysphagia, snoring, sleep apnea, and respiratory distress. The patient had no history of systemic disease. On the physical examination, a mass which was pushing the soft palate and the tonsilla palatina medially was detected at the left parapharyngeal region. It had a smooth surface, hard consistency and was not giving pulsation on the bimanual palpation. The size of the mass was approximately 6x4 cm in size (Figure II). There was no lymphadenopathy in the neck. Cranial nerve functions were normal. At the magnetic resonance imaging (MRI) of the neck; heterogeneous hypodense solid mass, approximately 7x6x4 cm in size, starting from the neighborhood of inferior level

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of pterygoid plates superiorly, extending to the left submandibular gland medial neighborhood at the caudal and causing narrowing in the airway column were determined at the left parapharyngeal region (Figure III). The mass were removed en bloc with transcervical approach without additional surgical procedures, under general anesthesia. There were no complications of vascular and neural tissues. The patient's definitive pathological result was reported as PA. There is no recurrence for one year, at the patient.

DISCUSSION

PA is a benign tumor in terms of both appearance and behaviour but in proportion to the residence time in the body can show malignant transformation to 1,6-9,4 % , if it exists for a long time without treatment (4).

PA is the most common minor salivary gland tumor and most commonly originates from palate, uncommonly seems on the parapharyngeal region (5). Parapharyngeal tumors rarely emerge and constitute to 0,5 % of all head and neck tumors (6). The 80 % of them are benign and PA is most common of all parafarengeal tumors (7). Parapharyngeal space is in the form of an inverted pyramid, is divided into two by the styloid process of temporal bone, termed prestyloid and poststyloid space (8, 9). Adipose tissue, lymph nodes and the deep lobe of parotid gland are located in the prestyloid region and the carotid artery, internal jugular vein, IX., X., XI. and XII. cranial nerves, sympathetic chain and lymph nodes located in the poststyloid region (9, 10). Masses in the poststyloid region including neurogenic tumors, paragangliomas, vascular tumors and aneurysms have usually benign character (11). Many different types of mass can be seen in the prestyloid region. The most common tumor seen in this region is PA, originated from the deep lobe of parotid gland (12). Parapharyngeal region tumors were classified according to the localization of the carotid artery in some publications. Tumors pushing the carotid artery posteriorly called prestyloid and tumors pushing anteriorly called poststyloid (8). Our case had pleomorphic adenoma located in the prestyloid region and pushing the carotid artery posteriorly. Parapharyngeal region tumors don't give symptom until reaching the sufficient size, so early diagnosis cannot usually be possi-

ble (6). Symptoms usually begin to appear when the tumor size is on 2,5-3,0 cm (13). Foreign body sensation in the throat, difficulty in swallowing, otological symptoms, volume change and trismus are the main symptoms (8). Conversely, the tumors of the palate including PA early create awareness and rarely reach a size larger than 1-2 cm. To our opinion, the tumor had reached to 6 cm size in patient 1 due to neglectation as he had dementia. He had been cured following the attention home care service. In such a tumor in this patient can affect the survival due to obstruction of feeding.

Salivary gland tumors are usually diagnosed by history, physical examination, histopathological and radiological assessment. CT and MRI provide useful information about the extension to superficial and deep tissues, size and placement of the tumor. While, CT is superior in detecting the bony structure about the hard plate, MRI has a higher resolution for soft tissue, so is superior in evaluation of parapharyngeal space tumors. Another important issue is the evaluation of the fat plan between the deep lobe of parotid gland and the tumor at parapharyngeal space. The lesions of the deep portion of the parotid gland extending to the parapharyngeal region and the lesions originating directly from the parapharyngeal region can be discriminated with this feature (14).

Following the preoperative diagnostic process, the fine needle aspiration biopsy can be preferred to the transoral open biopsy which can cause vascular damage on the parapharyngeal region tumors (7). The various surgical approaches to the treatment of tumors of the parapharyngeal region have been identified. Transoral, transcervical, transcervical-transmandibular, transcervical-transparotid approaches are most frequently performed surgical approaches. The surgical approach which provides the maximum field of view of the tumor for complete removal, causing minimum functional and aesthetic disadvantage should be preferred (15). In our case, it was predicted that the complete excision of the tumor by transoral approach, might be difficult due to the dominance of anatomical structures and additional surgical procedures such as mandibulectomy might be required to reach the mass. However, we have reached completely to the mass by transcervical approach and excised the submandibular gland and no additional procedures were required.

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