

Synchronous appearance of extensive pleomorphic adenoma with Warthin's tumour within the superficial lobe of the parotid

Rozległy gruczolak wielopostaciowy płata dodatkowego współistniejący z guzem Wartina płata powierzchownego ślinianki przyusznej

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ABSTRACT: The paper describes 65-year-old man diagnosed with a widespread pleomorphic adenoma of accessory gland coexisting with Warthin's tumor of the parotid gland superficial lobe. The course of disease and its treatment considering the surgical approach are presented.

KEYWORDS: accessory parotid glands, synchronous neoplasms, parotidectomy

STRESZCZENIE: Opisano 65-letniego mężczyznę z rozległym gruczolakiem wielopostaciowym płata dodatkowego współistniejącym z guzem Wartina płata powierzchownego ślinianki przyusznej. Przedstawiono przebieg choroby i leczenia z uwzględnieniem rodzaju dostępu operacyjnego.

SŁOWA KLUCZOWE: płat dodatkowy ślinianki przyusznej, nowotwór synchroniczny, parotidektomia

INTRODUCTION

Accessory parotid gland (also referred to as the accessory lobe of the parotid) is a small salivary gland that is observed in 21-69% of the population [1, 2, 3, 4]. It is located on the masseter muscle and is connected to the Stensen's duct, and it is not connected to the main stroma of the parotid. Its vascular supply, which originates from the facial artery, is a characteristic feature of this structure. Tumours of the accessory lobe are rarely observed and constitute a maximum of 10% of all tumours within the parotid gland [5]. Tumours of the accessory salivary gland constitute a non-homogenous group and they are similar to the tumours that are observed in the main part of the gland. However, 26-50% of the tumours are malignant

[5,6,7]. Synchronous appearance of tumours that show different histological patterns is seen in 1.7-5% of patients with salivary gland tumours [8,9]. Synchronic tumours of the accessory lobe are observed sporadically, and both benign and malignant lesions may coincide. Surgical excision is the treatment method of choice. We would like to present the case of a synchronous tumour of the accessory and superficial lobes in a 65-year-old male patient.

CASE REPORT

A 65-year-old male patient who had been smoking for several years was admitted to the Dept. of Otolaryngology due to a tu-



Fig. 1. Patient's appearance before surgery.

mour within the left cheek (Fig. 1). The appearance of the tumour was spotted by the patients 8 years prior to admittance. The tumour had been growing gradually and had not caused any symptoms. At admittance, the clinical examination revealed a hard, painless tumour of 4 x 7 cm in diameter within the left cheek. The tumour was fixed to the base and unaffected skin. The function of the facial nerve was physiological and neck lymph nodes were imperceptible. Physiological saliva was secreted through the Stensen's duct. Preoperative MRI scans revealed an extensive, well-demarcated pathological mass of 6x3x4 cm in diameter that adjoined the masseter muscle within the left cheek, and which had numerous septa, and another lesion within the superficial lobe of the parotid of 1.5x1 cm in diameter (Fig. 2). The diagnosis of pleomorphic adenoma was made on the basis of fine-needle aspirational biopsy. Due to its asymptomatic course and MR features that did not cause oncological concern, the biopsy of the smaller tumour within the superficial lobe was not performed. It was decided that the patient should undergo superficial parotidectomy with tumour excision. Intraoperative facial nerve monitoring was used. With the use of the preauricular-cervical incision that was curved and elongated to the front, the surface of the parotid and a double-part tumour within the cheek were visualised. After the trunk of the facial nerve was identified, the superficial lobe of the parotid was elevated along with a small nodule of approximately 1.5 cm in diameter in its lower part. Afterwards, the preparation was performed along the buccal and zygomatic branches of the facial nerve that entwined the tumour and were placed partially in its capsule. The branches were then separated from the lesion. The tumour was released from surrounding tissues and after the Stensen's duct was ligated, the tumour was removed together with the superficial lobe of the parotid. The anatomic continuity of the facial nerve was retained (Fig. 3). Histopathological examination of the surgical specimen revealed the presence of hypercellular stroma of 3MF/10HPF mitotic index whose picture matched

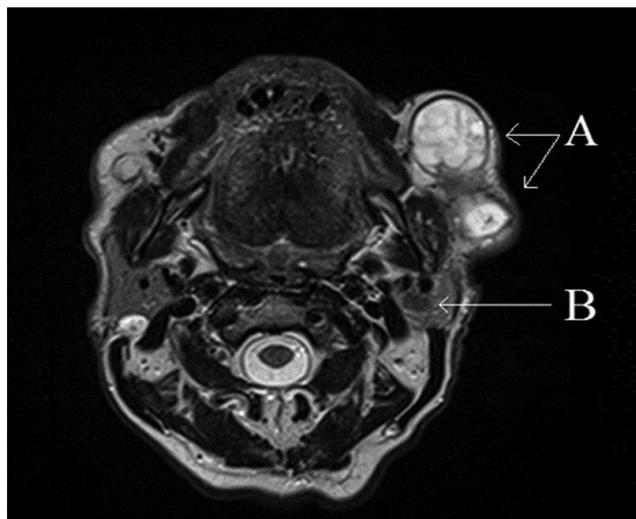


Fig. 2. MRI of the facial part of the cranium. The arrow indicates the extensive tumour of the accessory parotid gland (A) and within the superficial lobe of the parotid (B).

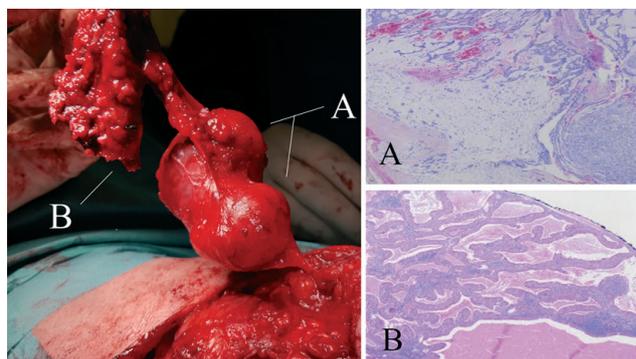


Fig. 3. Intraoperative pictures. The moment of cutting Stensen's duct with the accessory gland tumour and superficial lobe of the parotid, and microscopic images of both tumours (H-E, 40x). A – pleomorphic adenoma, B – Warthin's tumour.



Fig. 4. Patient's appearance 6 months after surgery.

pleomorphic adenoma. Moreover, a small Warthin tumour lesion was also diagnosed. Surgical margins were free of neoplastic cells (Fig. 4). The patient was discharged 4 days after surgery in general and local good state of health with physiological functioning of the facial nerve.

DISCUSSION

Neoplasms affecting the superficial lobe of the parotid are observed rarely [5]. Malignant tumours are observed more frequently within accessory lobe than in the parotid itself, and their incidence is estimated at 26-50% of all cases [5, 6,7]. Pleomorphic adenoma is the most frequently observed benign lesion, and mucoepidermoid carcinoma is the most frequently observed malignant lesion [3, 10,11]. Coincidence of a few neoplasms within the salivary gland is estimated at approximately 1.7-5% [8,9]. Papillary cystadenoma lymphomatosum and pleomorphic adenoma are the most frequently coinciding tumours, as was shown in our case [10]. Such lesions affect male patients more frequently [12].

Synchronous appearance of two tumours of different histopathological structure within one gland is independent and there is no causal relationship between the two lesions.

The cause for the development of pleomorphic adenoma in the patient remains unknown. There are two main factors that are

known to be the predisposing factors for the development of this lesion: exposure to ionising radiation and simian virus 40. However, neither of these was confirmed in the patient [13]. The development of Warthin's tumour in our patient is related to his nicotine addiction and the influence of such harmful substances, as e.g. benzopyrene or arsenic, whose influence may cause the glandular epithelium undergo metaplasia into neoplastic tissue [14].

Symptoms of benign tumours within the accessory parotid and the main parotid parenchyma is similar. They are characterized by the presence of a slowly growing tumour of the cheek that is painless and in which the facial nerve is not destroyed. Such course was observed in the discussed patient. Ultrasonography, magnetic resonance imaging, and fine-needle biopsy are used for preoperative diagnostics. Surgical treatment is the treatment method of choice. There are three ways of approaching the tumours located within the accessory lobe within the cheek: through the oral cavity, through an incision over the tumour, and with the use parotidectomy performed using extended preauricular-cervical incision [15].

Accessing tumours within the accessory lobe with the use of parotidectomy makes it possible to protect the facial nerve, to identify the position of the duct, and provides full elimination of the disease with good esthetic outcomes [3,16]. Removal of the tumour through the oral cavity provides a good aesthetic outcome but, at

the same time, it is related with poor control over the buccal branch of the facial nerve and Stenon's duct. When performing this kind of access, the risk of surgery being non-radical is also high [17]. If the incision over the tumour is performed, a scar appears within the face and the risk of damaging buccal and zygomatic branches of the facial nerve increases to 40% [3, 16, 18].

CONCLUSION

Benign synchronic tumours of the accessory lobe and the proper parotid are observed rarely. Parotidectomy access is the treatment method of choice when treating large tumours of the accessory lobe.

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