Epidermoid Cyst of the Floor of the Mouth in a 34-Year-Old Woman – Case Report

Torbiel naskórkowa dna jamy ustnej u 34-letniej kobiety – opis przypadku

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Abstract

The study describes the aetiology of epidermoid cyst and the case of the cyst localized in the floor of the mouth of a 34-year-old woman treated and operated in The Department of Oral and Maxillo-Facial Surgery of the Medical University in Lublin. The type of cyst was confirmed histopathologically (Dent. Med. Probl. 2009, 46, 4, 506–508).

Key words: epidermoid cyst, dermoid cyst, treatment, diagnosis.

Both epidermoid and dermoid cysts develop as a result of the dislocation of single cells of the outer germ layers of the epidermis or dermis during the closure and formation of body cavities, inside the developmental fissures. Post traumatic etiopathogenesis of the epidermis dislocation inside the tissues is also known, especially in the case of epidermoid and intraosseous cysts. The epidermoid cyst of the floor of the mouth develops from the embryonic persistent epithelial nests at the site of the II and III branchial arch junctions at the back of the tongue between the muscles of the floor of the mouth. It is built of the layer of epidermis resting on the delicate coat of the connective tissue the maturity of which is similar to the epidermis. The cyst consists of corneous mass, forming concentric lamellas as well as cholesterol. Epidermoid cyst unlike the dermoid cyst does not include such elements as hair, hair follicles, sebaceous or sweat glands. The development of the change is slow, asymptomatic and, most frequently, it is clinically diagnosed in patient’s adult years. The described case confirms the most frequent age span in which the above mentioned changes occur – between the age of 23 and 30, with no sex preference. Clinically, the epidermoid cyst causes moderately painful prominence in the oral floor of soft and elastic consistency which makes it difficult to eat, speak and in extreme cases also to breathe. The localization of the cyst below the geniohyoid muscle gives visual effect of the ‘double chin’. The treatment of choice in this type of change is a complete surgical removal, most frequently with the extraoral section. No neoplastic transformation in this type of change is observed; however, recovering occur after the incomplete removal of the change [1–7].

Case Report

The patient B.G., aged 34, case history No 08-12943/347 admitted to the Clinic of Oral and Maxillo-Facial Surgery of the Medical University in Lublin in May 2008 because of the tumour of the floor of the mouth. As the patient states, she noticed the change in December 2007. Initially, it was
a small swelling in the submental region, then a prominence in the floor of the mouth (Fig. 1). The patient did not complain of any pain, just the discomfort while swallowing, speaking and eating. In her general health state history there was hyperthyroidism diagnosed 2.5 years before, presently in the state of euthyreosis, being controlled by endocrinologist. The clinical examination on the day of admission revealed the prominence in the floor of the mouth which was soft, elastic and painless as well as considerable swelling in the submental region, covered with unchanged soft tissue (Fig. 2).

A tumour was movable with reference to the surrounding tissues and smooth surface, cohesive, about 7 cm in diameter.

Essential diagnostics of the lesion was introduced and the USG examination of the submental region was performed as well as CT scan with the contrast medium of the oral cavity and neck. In the CT scan, within the floor of the mouth, a round area with the diameter of 40x57 was found and fluid density around 20-30H which did not intensify the contrast, though, revealing a smooth outline and molding the adjacent tissues. Submandibular and cervical lymph nodes as well as the osseous structures did not reveal any pathological changes.

After the performance of blood and urine tests, including thyroid hormones level and internist consultation the patient was qualified to the operative procedure in general anaesthesia.

The operative procedure of the tumour removal was carried out with endotracheal intubation through the inferior nasal passage, by the extraoral incision along the internal edge of the dental arch (34–46), exposing part of a wall of a large cyst. A decision of additional extraoral incision in the submental region was made because of extensive-ness of the change and its expansion over the geniohyoid muscle. A large tumour with a diameter of 8 cm, with comparatively thin capsule filled with grainy brown mass was enucleated and sent to histopathological examination (Fig. 3). After the surgery, tight suturing of the mucosa was performed in the oral cavity, a Redon drain was placed at the site of extraoral incision and then removed after two days. No complications in the post-operative healing of wound were observed. On the fifth day after the surgery, the patient was discharged from the hospital in general and local good health state. The result of histopathological examination No 56652 was cystis epidermalis fundi cavi oris.

The successive control examinations showed no relapse of the change.
Discussion

Cysts of the soft tissues in the submental region, not damaging the osseous tissue are most frequently not revealed in review radiograms. Data concerning the extensiveness of a change, its localization and relation to other organs can be obtained by the use of contrast radiography. It considerably facilitates planning of the operative procedure. Clinically, these cysts are oval or round tumours of various sizes slowly proliferating and painlessly molding adjacent tissues. In time, they make it difficult to speak and swallow. They also cause shortness of breath because of exerting the pressure on epiglottis. They should be differentiated in the clinical examination from sublingual sialocele, thyrolingual cyst, and neoplasms of the tongue and the floor of the mouth, atheromateous cyst, lipoma or displaced thyroid [8].

The treatment of choice is radical removal with preservation of tumour capsule from the intra- or extroral incision. At the same time, the latter one performed as a cosmetic procedure in a natural fold of skin definitely facilitates intraoperative visibility which results in the greater precision of the surgery [1–8].

References


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