# Case report of a dermoid cyst in the floor of the mouth of a 17-year old female patient

Opis przypadku cysty dermoidalnej w dnie jamy ustnej u 17-letniej pacjentki

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#### KEYWORDS:

- · dermoid cyst
- · floor of the mouth
- teratoma
- · cystic mass

# SŁOWA KLUCZOWE:

- · cysta dermoidalna
- · dno jamy ustnej
- potworniak
- · masa torbielowata

## ABSTRACT

At the floor of the mouth, various types of pathological lesions may arise. Their diagnosis and differentiation are of significant clinical importance due to different course of the disease and treatment methods. This article presents a case of a 17-year-old female patient who has been diagnosed with a dermoid cyst by accident. Differential diagnosis due to a similar morphology of the lesion involved mainly a ranula. A complete resection of the lesion was performed. Histopathological examination showed a dermoid cyst, which is a rare lesion in this location.

#### STRESZECZENIE

W dnie jamy ustnej mogą powstawać patologiczne zmiany różnego typu. Bardzo ważna jest ich diagnostyka i różnicowanie ze względu na odmienny sposób leczenia. Praca przedstawia przypadek 17-letniej pacjentki, u której przypadkowo w badaniu obrazowym wykryto torbiel dermoidalną. Diagnostyka różnicowa ze względu na zbliżoną morfologię zmiany, objęła przede wszystkim żabkę (ranula). Wykonano całkowitą resekcję zmiany. Badanie histopatologiczne wykazało torbiel dermoidalną, która jest dość rzadką zmianą w tej lokalizacji.

# Introduction

The floor of the mouth is made up of various types of tissues from which different types of cancers originate (1). They may have a similar morphology and cause similar symptoms, but their treatment may vary significantly. A rare but fairly known lesion in the floor of the mouth is the so-called frog, or a sublingual gland cyst (ranula). The ranula is a pseudocyst arising from the extravasation of mucus, which develops within the salivary gland, mainly in the sublingual gland. It rarely becomes malignant (7). It is cured by marsupialization of the cyst wall or removal of the cyst along with the salivary gland (1, 2, 8). The dermoid cyst, on the other hand, is created by an incorrect displacement of the ectoderm in the process of embryogenesis. It is made of a cartilage bag lined with epithelium, inside of which can include fat, teeth and hair (3). Treatment method for such cysts is their complete removal (4,5). At the floor of the mouth, there may also be salivary gland tumors, cysts of the thyroid-laryngeal duct, angioma, lipoma, neuroflibroma (3). Due to the differences in the etiology and the treatment methods, it is extremely important to accurately diagnose lesions that occur at the floor of the mouth. The article presents a case of a patient in whom a dermoid cyst was discovered by accident.

# Case report

A 17-year-old girl was admitted to the Department of Pediatric Laryngology at the Hospital in Dziekanów Leśny in order

to surgically remove a cystic lesion of the floor of the mouth. This lesion was detected accidentally when the CT scan of the head was performed because of the symptomatic chronic sinusitis. The cyst in the floor of the mouth did not cause any symptoms or complaints from the patient. In the intraoral examination, a fairly hard, cohesive, circular lesion could be felt. The cervical lymph nodes were not enlarged. Initially, the lesion was suspected to be a ranula. The CT result showed a well-defined homogeneous, hypodense lesion at air density (Fig. 1). The surgery was performed through the intraoral access and the whole lesion was excised (Fig. 2,3). The material was sent to histopathological examination, which confirmed a dermoid cyst.

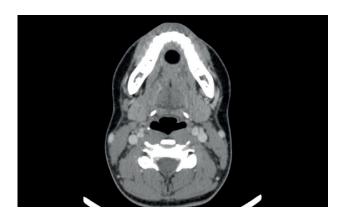


Fig. 1. CT scan showing the lesion.

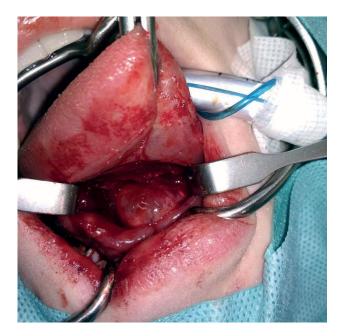


Fig. 2. The floor of the mouth with the dermoid cyst during the surgery.

# Conclusions

In summary, in the case of a lesion in the floor of the mouth, the diagnostics and clinical differentiation are crucial, because only then the right treatment can be chosen. Imaging tests are of great importance here, i.e. CT and ultrasound, but it is the result of histopathological examination that confirms the final diagnosis. The material should always be subjected to histopathological analysis, which is essential in the final assesment (6). The above case also indicates a need for a thorough analysis of the radiological test images.

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Fig. 3. The removed dermoid cyst.

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