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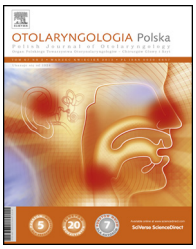

Case report/Kazuistyka

Neurofibroma of sinus maxillae

Nerwiakowłókniak zatoki szczękowej

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ABSTRACT

Neurofibroma is a benign tumour composed from Schwann cells. Localization in sinus maxillea is very rare. Authors presenting case which was treatment in Maxillo-Facial Surgery Clinic in Wrocław.

Introduction

Neurofibroma is a benign tumor originating from peripheral nerves sheath. It may have varied cell structure and most frequently originates from Schwann cells or fibroblasts [1, 2]. Other authors claim that neurobibroma is a combination of Schwann cells, fibroblasts, peripheral nerves cells and intermedial cells [2–4].

WHO classified neurofibromas into: dermal and plexiform. Dermal neurobiromas are located mainly in skin area and are composed of single peripheral nerves and resemble soft pedanculated masses of skin in a form of bump. Plexiform neurofibromas are composed of many nerve bundles and located mainly in subcutaneous area and discolour the tissue above the tumor. While growing they may expand to a very wide area and become larger.

Other histopathological classification of nerofibromas depends on the tumour location (the so called occasional neurofibromas). There are following types of those:

1. Diffuse – This is a type of neurofibroma consists of round or slightly pointed Shwann cells located in collagen fibre layer.

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There are often Wagner-Meissner like structures. The tumor usually grows in dermal and subcutaneous layers spreading over taken area and tissue. They are most frequently located in neck and head tissues.
2. Plexiform – This form of neurofibroma is connected with nerves changing them into extensive intircate masses. It is common in patients suffering from von Recklinghausen disease (neurofibromatosis NF1).
3. Epithelioid – Neurofibroma where most Schwann cells are round or polyline shaped.
4. Pacinian – A type of neurofibroma where small round Pacini body-like structures dominate [5].

Localized and single neurofibroma tumors often grow and expand along peripheral nerves as well separated but non-encapsulated tumors. Very rarely in tumor area there is necrosis and cystic degeneration. Sporadically they may be found as a part of NF-1 and most of them become visible at the age of 30 or 40 [6–11].

Case report

A female aged 79 case history number 31296/11 was admitted to the Cranio-Surgery Department in July 2011 with symptoms of left sinus tumor. During examination bump-distention of the left cheek tissue and left suborbital area were diagnosed. The tissue above the lesion was unchanged and of proper temperature. The patient complained about decreasing nose patency for a few years and the presence of white secrete on the back wall of the throat. She also mentioned left suborbital nerve function disorder. Intraorally there was an alveolar bone distention in the maxilla. The tumor side maxilla was toothless. The patient did not report pain while palpation examination. Coexistent diseases: hypertension, pleuritis in the past, family history irrelevant.

After performing tumor biopsy histopathological result showed neurofibroma atypicum. After surgery this was confirmed in the whole removed tissue.

In CT scan 7213/CT/2011 of 27.09.2011: in CT examination of the craniofacial region with contrast extensive tumor-like structure occupying left sinus maxilla was identified, spreading to nearby bone structures destroying them completely. To the bottom the tumor is located in upper jaw bone also destroying it completely. All walls of maxillary sinus are completely damaged. The tumor penetrates the nasal cavity damaging lower and lateral of the orbital and zygomatic bone, leaving only the frontal processes unaffected. Tumor outline is polycyclic. Defined tumor outline with hypodense area in the centre are visible. The lack of the teeth in the upper jaw excluding two teeth on the right side. There were no changes in the intraorbital structures (Figs. 1–6) description: B. Hendrich MD, PhD.

En-block surgical excision was performer including the left side of upper jaw and orbital floor. Afterward the floor of orbital bone was reconstructed using titanium grid. The size of the removed tumor was 5 cm × 3 cm, 5 cm × 2 cm. After the surgery the patient underwent prosthodontic rehabilitation and is still under outpatient department control.

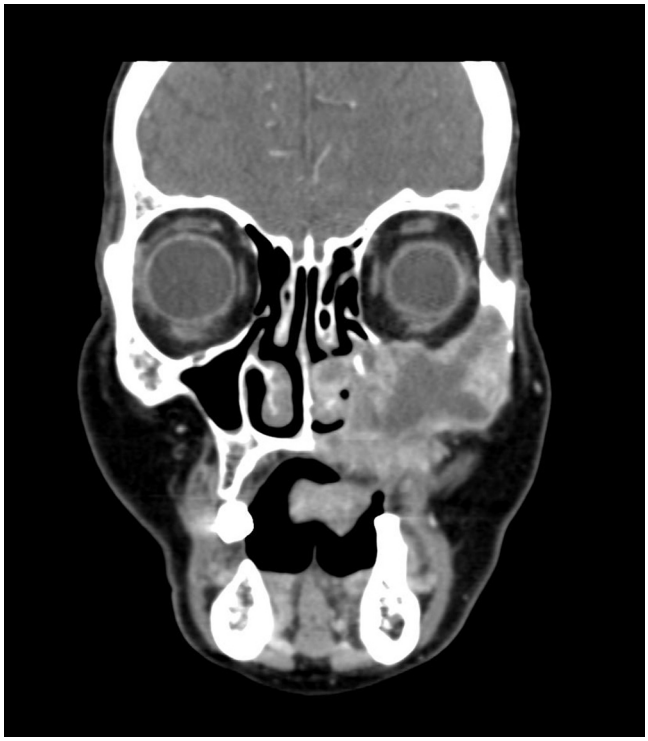

Fig. 1 – CT scan of the tumor in frontal plane of the maxillary sinus
Ryc. 1 – Skan TK guza w płaszczyźnie czołowym region zatoki szczękowej

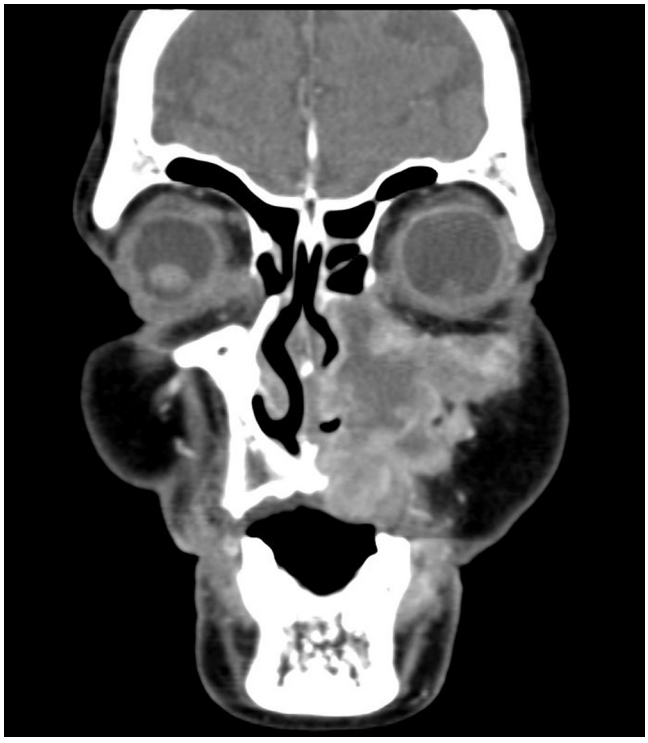

Fig. 2 – CT scan of the tumor in frontal plane of the cheek reg
Ryc. 2 – Skan TK guza w płaszczyźnie czołowym region policzka