

CLINICAL CASE

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Solitary Circumscribed Neuroma of the Tongue – Case Report

Pojedynczy i ograniczony nerwiak języka – opis przypadku

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Abstract

The aim of this case report is to introduce a rare clinical case of solitary lingual neuroma in a 54-year-old woman. The histological investigation revealed a diagnosis of mucous neuroma. Further diagnostic investigation excluded any association with systemic pathologies; consequently, a solitary oral mucous neuroma was diagnosed (**Dent. Med. Probl. 2005, 42, 2, 363–365**).

Key words: mucous neuroma, tongue.

Streszczenie

Przedstawiono rzadki klinicznie przypadek pojedynczego nerwiaka języka u 54-letniej kobiety. Badanie histopatologiczne ujawniło rozpoznanie nerwiaka. Wcześniejsze badanie diagnostyczne wykluczyło związek zmian na języku z patologiami układowymi, a następnie zdiagnozowano pojedynczy nerwiak śluzówkowy (**Dent. Med. Probl. 2005, 42, 2, 363–365**).

Słowa kluczowe: nerwiak śluzówkowy, język.

Case Report

A 54-year-old patient came to our observation at the Oral Medicine Department of the University of Palermo for the appearance of a small tumefaction in correspondence with the tongue. The patient's dentist thought it right not to intervene, or to request any further specialist's investigation. Clinical observation had led the dentist to accept a diagnosis of total benignity. Fearing that might be a serious pathology, the patient consulted us. The anamnesis investigation allowed us to discover that the patient had been operated for mammary carcinoma about 15 years before; the patient did not smoke or drink, and did not take medicines on a regular basis. The objective examination revealed an approximately 1-cm diameter tumefaction in correspondence with the lingual left margin (Fig. 1). The neoplasia was not painful

itself, nor under palpation. Palpation revealed a soft-elastic, mobile and circumscribed tumefaction. After evaluating the anamnesis and the clinical aspect of the lesion, a suspected lipoma or a mucous cyst or fibroma was diagnosed. The execution of a biopsy with subsequent histological examination was decided. The histological result was absolutely unexpected, and confirmed the presence of mucous neuroma. Microscopically, the tumor was characterised by a moderately cellular, fascicular proliferation of spindle cells that showed some areas of nuclear palisading. Immunohistochemical stains revealed that the lesion was composed largely of S-100 protein-positive Schwann cells and variable numbers of peripheral nerve axons, which was identified by the positive neurofilament staining (Fig. 2). After the histological diagnosis, and knowing the clinical associations with adrenal or thyroidal medullar

carcinoma connected with type II multiple endocrine neoplasia [3, 4], further diagnostic investigations were carried out. The latter allowed us to exclude a systemic involvement, giving the possibility to make a final diagnosis of solitary oral mucous neuroma.

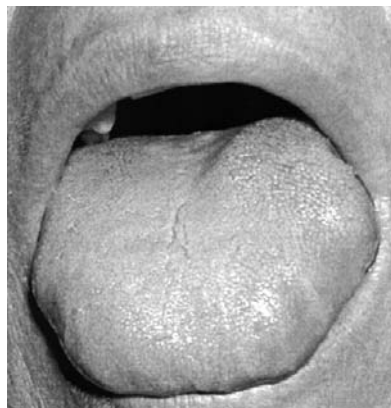


Fig. 1. Small tumefaction in correspondence with the tongue

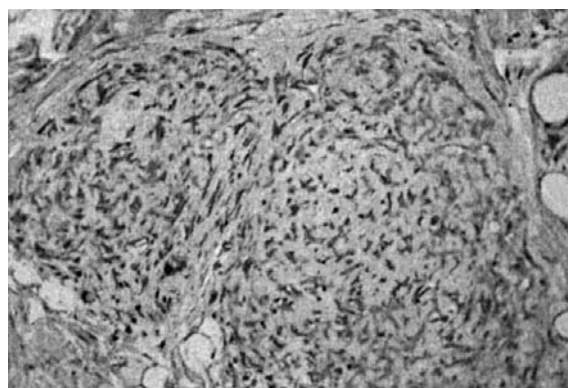
Ryc. 1. Nieznaczne obrzmienie języka

Discussion

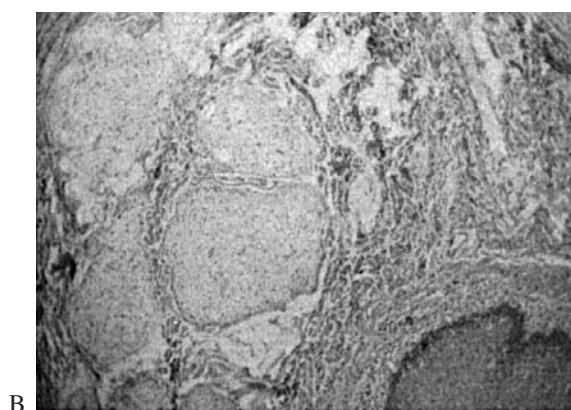
Neural tissue tumours of the oral cavity are rare [1, 2]. The non-specific clinical characteristic of the lesion did not permit a correct diagnosis of suspected disease [1, 2]. The instrumental diagnosis induced the clinicians to investigate on the potential presence of thyroidal and adrenal medulla neoplasias for a possible association with type II multiple endocrine neoplasia [3]. The multiple endocrine neoplasia syndromes (MEN) are an association of tumours of 2 or more endocrine glands [3, 4]. The facial, oral and ocular characteristics are reliable markers of the disease. The patients give a history most commonly of slipped capital femoral epiphysis, hypertension and life-long diarrhoea and/or constipation [3, 4]. MEN2b most commonly characterised by nodules on the anterior aspect of the tongue, thickened lips with nodules, thickened upper eyelids, broadened nasal



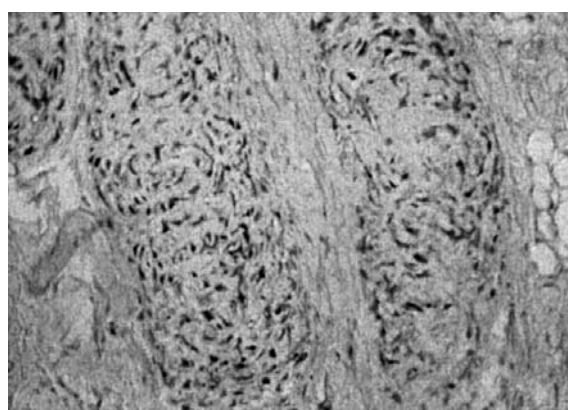
A



C



B



D

Fig. 2. Moderately cellular, fascicular proliferation of spindle cells that showed some areas of nuclear palisading. Immunohistochemical stains revealed that the lesion was composed largely of S-100 protein-positive Schwann cells and variable numbers of peripheral nerve axons, which was identified by the positive neurofilament staining: **A** – hematoxylin-eosin stain, magnification $\times 2.5$, **B** – hematoxylin-eosin stain, magnification $\times 10$, **C, D** – S-100 protein + vimentin immunostain, magnification $\times 40$

Ryc. 2. Średniozaawansowana pęczkowata proliferacja komórek wrzecionowatych, które tworzą obszary nacieczone przez komórki o palisadowych jądrach. Barwienie immunohistochemiczne wskazało, że zmiany są złożone głównie z komórek Schwanna dodatnich dla proteiny S-100 i różnej liczby obwodowych aksonów nerwowych, które są rozpoznane przez barwienie pozytywne dla neurofilamentów: **A** – barwienie hemotoksylina-eozyną, powiększenie $2,5 \times$, **B** – barwienie hemotoksylina-eozyną, powiększenie $10 \times$, **C, D** – barwienie immunohistochemiczne S-100 proteina + vimentyna, powiększenie $40 \times$

bridge, thickened corneal nerves and dilated, symmetrical, pedunculated nodules on the cheek mucous. The diagnostic investigations allowed us to exclude a systemic involvement.

It was only with the result of the histological examination that the diagnostic doubt of multiple endocrine neoplasia arose. This report allows us to repeat that any lesion of the oral mucous which is

clinically not easily definable must not be underestimated, because it may be the first opportunity for a diagnosis of systemic diseases which can be fatal if not diagnosed in time.

Although very rare, mucous neuroma should be taken into consideration in the differential diagnosis of any lingual mass.

References

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