

Excision Biopsy of Tongue Lesions: Two Case Reports

Eva Rieh, MD; Susan Arndt, MD; Department of Oto-Rhino-Laryngology,
Head and Neck Surgery University Medical Center Freiburg (Head: Prof. Dr. h. c. R. Laszig)

Lesions in the oral cavities may concern the tongue, tongue base, buccal mucosa, lips or base of the mouth. There are benign and malignant tumours as well as precancerous lesions. They may be asymptomatic or clinically manifest through growth in size, pain, bleedings or functional disorders. To rule out malignancies or in case of disorders, it is essential to perform a biopsy or full excision of the lesion and examine it histologically.

We present the cases of two patients with lesions on the bottom of the tongue base as well as the back of the tongue. Both patients suffered from clinical symptoms such as pain and progressive growths, and one patient was bleeding from the lesion. In both cases we performed excision biopsies under local anaesthesia on an out-patient basis. The histological examinations revealed a squamous epithelium papilloma in one case and led to the differential diagnosis of haemangioma or granuloma pyogenicum in the other. The recovery for both patients proceeded without complications, and the results are satisfactory.

Introduction: Benign tumours of the tongue may emerge from all types of epithelial and mesenchymal tissues around the tongue. In addition to papilloma and pleomorphic adenoma there are also mesenchymal tumours such as fibroma, lipoma, rhabdomyoma and leiomyoma as well as chondroma (RIEDE).

In case of concomitant disorders or to exclude malignancies by differential diagnosis, the treatment of choice for most benign expansions is surgical removal (REICHART).

Methods: We have treated two patients (1 male, age 14; 1 female, age 55) who suffered from lesions on the tongue (Ill. 1). In both cases the tumours were causing pain and growing progressively. The male patient was suspected to have haemangioma and had suffered twice preoperatively from bleedings, which would have required in-patient monitoring.



Illustration 1: Sublingual Papilloma on left, 55-year old female patient

In both cases the tumours were dissected under local anaesthesia on an out-patient basis. Both excisions were performed with the CURIS Radiofrequency Generator (Sutter Medizintechnik, Freiburg/Germany). To minimize bleeding from the incisions we used a monopolar needle (Arrowtip™ – Sutter Medizintechnik, Freiburg/Germany) and applied a frequency of 4 MHz with an output of 10 watts (Ill. 2, 3). The excised specimen were examined histologically by our in-house general pathology department. The results were discussed during a follow-up session scheduled with the patients seven days after the intervention.



Illustration 2: Reduced-bleeding excision of expansion with monopolar needle



Illustration 3: CURIS radiofrequency unit (Sutter Medizintechnik GmbH)

Results: Both interventions could be performed without any difficulties under local anaesthesia. There were no intraoperative problems such as bleedings or pain. In both cases the tumours were fully removed (Pic. 4). Postoperative recovery was without complications. During the scheduled follow-up there was evidence of proper healing in both cases. Histological examination yielded a haemangioma in the 14-year old male patient and squamous epithelium papilloma in the 55-year old female patient.



Illustration 4: Postoperative site after precise and full tumour resection

Discussion: Lesions of the tongue may be benign or malignant. Such tumours usually originate in epithelial or mesenchymal tissue and may come in the shape of e. g. papilloma, adenoma, fibroma, lipoma, chondroma or myoma (RIEDE).

Haemangioma and lymphangioma are special forms of expansion. They are usually congenital and may degenerate in the first two years of life. These types of tumour should only be removed by standard treatment, radiofrequency or laser surgery if the tumour persists after age two of the patient, unless there are problems with ingestion or a shift in the airway tracts. There are other therapeutic options in addition to standard methods of treatment or cryosurgical excision such as systematic corticoid treatment, local sclerosing or embolization, use of magnesium wire and laser treatment (NEVILLE, JUSTOVA).

Conclusion: Surgical removal and follow-up with histological diagnosis is the treatment of choice for lesions of the tongue, and particularly apt to exclude malignancies. Depending on the size of the tumours and their vascularisation, the probability of complications is low and it is possible to achieve good functional results.



Dr. Susan Arndt



Dr. Eva Rieh

Correspondence: Dr. Eva Rieh, Department of Oto-Rhino-Laryngology, Head and Neck Surgery, University Medical Center Freiburg, Killianstr. 5, 79106 Freiburg, Germany. Tel.: +49 (761) 270-4212, Fax: +49 (761) 270-4111, mail: rieh@hno.ukl.uni-freiburg.de

References: 1. Justova E, Pazdera J, Mihal V: Contemporary possibilities of treating vasoformative tissue tumours. Acta Univ. Palacki. Olomuc., Fac. Med. Vol. 143, 2000: 37-42. 2. Neville BW, Damm DD, Allen CM, Bouquot JE: Oral and Maxillofacial Pathology, Second Edition, W.B. Saunders Company, Philadelphia, London, New York, 2002. 3. Reichart PA: Surgical management of non-malignant lesions of the mouth, in: Maxillofacial Surgery, (Herausgeber: Booth P.W., Schendel St.A., Hausamen J.-E.), Volume 2, Kapitel 87, 1999. 4. Riede UN, Wiestler OD, Müller HJ: Störungen des Zellwachstums, in: Allgemeine und spezielle Pathologie (Herausgeber: Riede U.-N., Schaefer H.-E.), Kapitel 7, Thieme-Verlag, Stuttgart, New York, 2001.