Excision Biopsy of Tongue Lesions: Two Case Reports

E. Heinert, S. Arndt

Lesions in the oral cavities may concern the tongue, tongue base, buccal mucosa, lips or base of the mouth.There are benign and malign tumors 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 anesthesia on an outpatient basis. The histological examinations revealed a squamous epithelium papilloma in one case and led to the differential diagnosis of hemangioma or granuloma pyogenicum in the other. The recovery for both patients proceeded without complications, and the results are satisfactory.

Introduction: Benign tumors of the tongue may emerge from all types of epithelial and mesenchymal tissues around the tongue. In addition to papilloma and pleomorphous adenoma there are also mesenchymal tumors such as fibroma, lipoma, rhabdomyoma and leiomyoma as well as chondroma [4].
In case of concomitant disorders or to exclude malignancies by differential diagnosis, the treatment of choice for most benign expansions is surgical removal [3].

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

Fig. 1: Sublingual Papilloma on right, 55-year old female patient

Fig. 2: Reduced-bleeding excision of expansion with ARROW*tip*™ monopolar microdissection electrode (REF 36 03 22)

In both cases the tumors were dissected under local anesthesia on an outpatient basis. Both excisions were performed with the CURIS® 4 MHz radiofrequency generator (Sutter Medizintechnik, Freiburg/Germany). To minimize bleeding from the incisions we used an ARROWtip™ monopolar micro-dissection electrode (Sutter Medizintechnik, Freiburg/Germany) and applied a frequency of 4 MHz with an output of 10 watts (Fig. 2, 4). 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.

Results: Both interventions could be performed without any difficulties under local anesthesia. There were no intraoperative problems such as bleedings or pain. In both cases the tumors were fully removed (Fig. 3). Postoperative recovery was without complications. During the scheduled follow-up there was evidence of proper healing in both cases. Histological examination yielded a hemangioma in the 14-year old male patient and squamous epithelium papilloma in the 55-year old female patient.

Fig. 3: Postoperative site after precise and full tumor resection

Discussion: Lesions of the tongue may be benign or malignant. Such tumors usually originate in epithelial or mesenchymal tissue and may come in the shape of e. g. papilloma, adenoma, fibroma, lipoma, chondroma or myoma [4].
Hemangioma and lymphangioma are special forms of expansion. They are usually congenital and may degenerate in the first two years of life. These types of tumor should only be removed by standard treatment, radiofrequency or laser surgery if the tumor 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 [1,2].

Fig. 4: CURIS® 4 MHz radiofrequency generator

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 tumors and their vascularisation, the probability of complications is low and it is possible to achieve good functional results.

S. Arndt, MD; E. Heinert, MD
Medical Center (Freiburg, Germany)

Correspondence: Dr. Eva Heinert, 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: heinert@hno.ukl.uni-freiburg.de

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PRECISION ELECTROSURGERY
Made in Germany

SUTTER MEDIZINTECHNIK GMBH
TULLASTRASSE 87 · 79108 FREIBURG/GERMANY
TEL. +49(0)761-51551-0 · FAX +49(0)761-51551-30
WWW.SUTTER-MED.COM · INFO@SUTTER-MED.DE