

# Difficulties in diagnosing lymphangiomas of the tongue treated with CO<sub>2</sub> laser vaporization

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**Abstract – Observation:** A 44-year-old patient was deferred for consultation for vesicles and whitish papules a few millimeters in diameter on the tongue. Painful inflammatory attacks and phases of mitigation alternated with each other. The clinical test results were all normal. The pathological examination indicated a lymphangiomatous component caused by inflammation. A CO<sub>2</sub> laser treatment was successfully initiated. Regular monitoring revealed no recurrence at the 12-month follow-up. **Comments:** Cystic lymphangioma is an early-stage benign tumor. Their occurrence in adults is rare. The case presented was atypical by the context and appearance of the lesions. The treatment of cystic lymphangioma in the oral cavity is surgical in nature, which consists of a complete removal of the cysts to avoid recurrences. Other treatments can be proposed: laser, sclerotherapy, ablation, and radiofrequency cauterization. **Conclusion:** Cystic lymphangioma in adults is rare. The malformations are sometimes difficult to diagnose. There is no evidence-based treatment but laser vaporization is an option for microcystic forms.

## Observation

Here we present the case of a 44-year-old patient with superficial microcystic lymphangioma of the tongue that was difficult to diagnose. There were no particular antecedents. Symptomatology began over a year ago with the gradual onset of whitish vesicles and papules that were a few millimeters in diameter. They were limited to the anterior edge of the tongue or its tip (Fig. 1). These lesions evolved as inflammatory flare-ups. During the exacerbations, there was an increase in the volume of papules causing intense pain (VAS 9/10), lingual edema, and bleeding. These inflammatory episodes occurred every 6 weeks and lasted between 24 and 48 h. The laboratory test results were unremarkable. A first biopsy was carried out highlighting a papillomatous aspect with nonspecific flushing and necrotic inflammatory zones. Symptomatic treatment with local corticosteroids (clobetasol) was prescribed.

Six months after these lesions appeared, a fresh biopsy was performed and the treatment by local corticosteroids was stopped. The histological aspect indicated inflammatory lymphangiomatosis (Fig. 2).

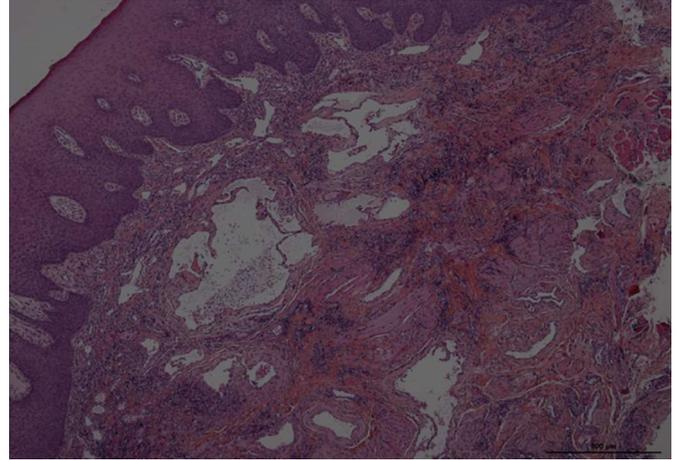
A CO<sub>2</sub> laser treatment was successfully administered. Regular follow-up examinations afterward revealed no recurrence, after 12 months of follow-up (Fig. 3).

## Comment

Lymphatic malformation, formerly called lymphangioma, is a benign malformation of the lymphatic vessels with a hamartomatous nature. Lymphatic malformations can be located in any body part, but they are often found in the head and neck. In the oral cavity, the tongue is the most common site. Lymphatic malformations are considered sequestrations of the lymphatic tissue that have retained their growth potential. Three variants have been described for these lymphangiomas [1]: capillary, cavernous, and cystic lymphangioma. Some clinical variants pose a diagnostic dilemma. Cystic lymphangioma is a benign tumor that usually occurs at a very early age. Diagnosis in 80–90% cases are made before the patient is aged 3 years, and occurrence in adults is very rarely observed [2]. Cystic lymphangioma is more frequently encountered at the cervical level. Occurrence on the tongue is not uncommon, but the case presented is atypical because of its location and the cystic aspect of the lesions was not immediately apparent. Rare cases occurring on the tongue, as described here, affect the posterior aspect of the tongue, more precisely behind the lingual papillae. The patient only had lesions on the anterior edge and the tip of the tongue. These lesions were in the form of papules of <3 mm in diameter. The treatment of cystic lymphangiomas in the oral cavity is surgical in nature and consists of a complete resection of the cysts to avoid recurrences [3]. Other treatments are sometimes proposed, including laser, sclerotherapy, ablation, and



**Fig 1.** Whitish vesicles and papules of the tongue border corresponding to microcystic lymphatic malformations.



**Fig 2.** Histological section (HES staining) showing chorion cavities corresponding to lymphatic malformations.



**Fig 3.** Control after 1 year.

cauterization by radio frequency, which has the goal of initiating secondary fibrosis. It is important that the patient understands that this pathology is benign and that it does not present a risk of malignant transformation.

### Conflicts of interests

The authors declare that they have no conflicts of interest in relation to this article.

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