

### Case 10.2

A 47-year-old Thai woman from Bangkok.

**Chief complaint:** Two erythematous plaques on both sides of tongue for 4 months.



**Present illness:** The patient presented with 4 months history of irritated erythematous plaque on both sides of tongue.

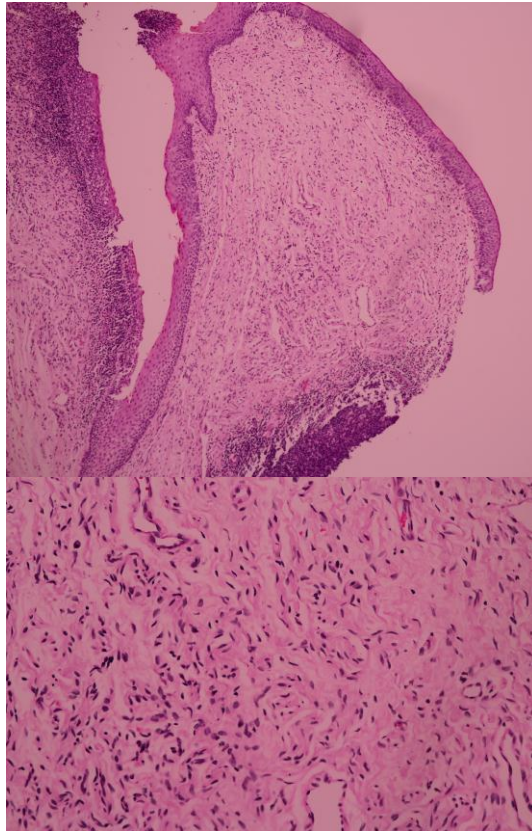
**Past history:** Unknown.

**Family history:** None of the patient's family members have similar problems.

**Skin examination:** ill-defined erythematous plaque (diameter 1.2 cm) on both sides of tongue, no evidence of café-au lait macules or axillary freckling.

#### **Histopathology :**

There is diffuse proliferation of oval and spindle cells, some of which show S-shaped, comma-shaped nuclei within the loose stroma in association with dense nodular inflammatory-cell infiltrate of lymphocytes.



**Diagnosis:** Oral neurofibroma

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### **Discussion**

Neurofibroma is a benign peripheral nerve sheath tumour, which arises from Schwann cells and perineural fibroblasts. Most of them are found in the head, neck and oral cavity as solitary or

multiple lesions associated with neurofibromatosis type 1 (NF-1).<sup>4</sup> Oral localization in a patient without signs of NF-1 is rarer showing an incidence ranging from 4 to 7% in most series of different authors.<sup>2</sup> It typically appears in late childhood or during teenage years.

The etiology of oral neurofibromas is largely unknown, and they appear to develop sporadically.<sup>4</sup> Clinically, oral neurofibromas usually appear as pediculated or sessile nodule, with slow growth. They are usually painless, but pain or paresthesia may occur due to nervous compression. The most frequent involvement site is the tongue, followed by the oral mucosa and floor of the mouth; palate and maxillary-mandibular bones are a rare localization of the disease.<sup>1</sup> The definitive diagnosis is due to histological examination.

Microscopically the tumor is composed of an irregular pattern of proliferative spindle cells. The stroma is composed of collagen fibers and mucoid masses. Small axons all over the tumoral tissue are demonstrated with silver staining. Neurofibromas are immunopositive for the S-100 protein in 85 to 100% of the cases, indicating its neural origin.<sup>5</sup> Treatment for solitary NF is surgical excision and recurrence is rare.<sup>5</sup>

## References

1. Vuity D, Németh Z, Bogdán S. A 40 year old palatal neurofibroma. A case report. *Fogorv Sz* 2013;106(1):3-6.
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3. Ming-Jen Lee, Ji-Hoon Cho, David J. Galas, Kai Wang. The systems biology of neurofibromatosis type 1—Critical roles for microRNA. *Experimental neurology* 2012; 235: 464-468.
4. Marocchio LS, Oliveira DT, Pereira iMC, et al. Sporadic and multiple neurofibromas in the head and neck region: A retrospective study of 33 years. *Clin Oral Invest* 2007;1 1(2):165-9.
5. Depprich R, Singh DD, Reinecke P. Solitary submucous neurofibroma of the mandible: review of the literature and report of a rare case 2009; 13: 5-24.

