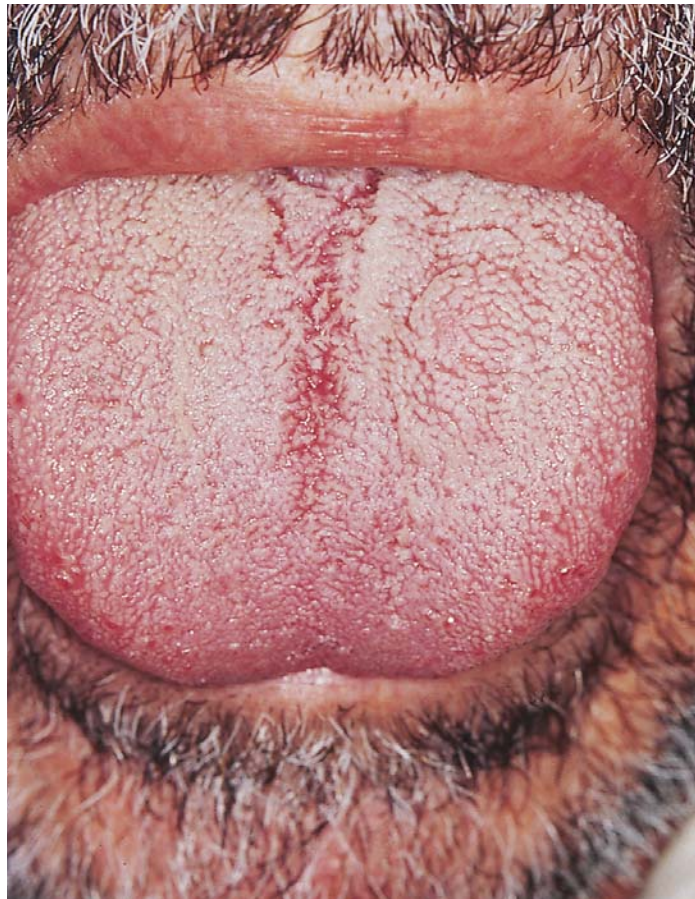


## What Is Your Diagnosis?

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A 60-year-old man presented with an enlarging asymptomatic mass on his tongue.

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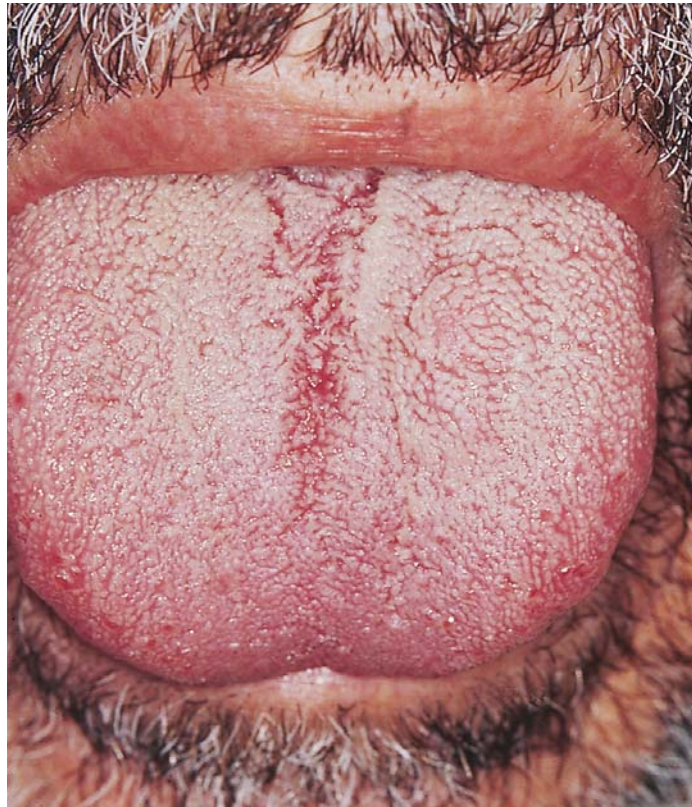
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## The Diagnosis: Intramuscular Hemangioma of the Tongue



Excision of the lesion revealed an intramuscular hemangioma histologically. Intramuscular hemangiomas account for 0.8% of all hemangiomas and often present in adults.<sup>1,2</sup> Symptoms of intramuscular discomfort may persist for several years, but patients usually are prompted to see a physician because of recent rapid growth of the neoplasm. These lesions frequently are located deep within the muscle. The deep location, rapid growth, infiltrative border, and tendency for the lesions to be fixed to surrounding tissues may create a clinical suspicion of malignancy.<sup>1,2</sup> Clinical misdiagnosis is common.<sup>3</sup> Definitive diagnosis is made histologically because radiographic and magnetic resonance imaging features also may be suspicious for malignancy.<sup>4,5</sup>

Intramuscular hemangiomas may occur in any striated muscles and most frequently present on the extremities. In the head and neck region, intramuscular hemangiomas most commonly involve the masseter muscle.<sup>6</sup> Masseter hemangiomas account for about 8% of all intramuscular hemangiomas and,

in contrast to other intramuscular hemangiomas, are more common in pediatric patients.<sup>7</sup> Intramuscular hemangiomas of the digastric muscle may mimic parotid tumors clinically.<sup>8</sup> Intramuscular hemangiomas of the tongue are uncommon. The lesions must be considered clinically before a surgical procedure is attempted because bleeding complications may occur with incisional or punch biopsy and needle aspiration may result in misdiagnosis.<sup>9,10</sup> Intramuscular hemangiomas are best treated with complete excision.

The clinical differential diagnosis includes granular cell tumors, rhabdomyomas, lipomas, thyroglossal duct cysts, liposarcomas, and angiosarcomas. Spindle cell hemangioendothelioma also may occur in an intramuscular location and presents with clinical and radiologic findings similar to those of intramuscular hemangioma.<sup>11</sup> Malignant endovascular papillary angioendothelioma (Dabska tumor) has been reported to arise within a deep intramuscular hemangioma.<sup>12</sup>

Treatment of intramuscular hemangioma consists of complete excision. The infiltrative borders of the lesion often require much wider excision than physical examination would suggest, and recurrence is generally related to subtotal excision.<sup>13,14</sup> Intramuscular hemangiomas demonstrate relatively low signal intensity on T1-weighted images. High contrast between the hemangioma and surrounding muscle often allows clear delineation of the lesion's extent on T2-weighted images. Thus, images from magnetic resonance imaging can be of great value in planning appropriate margins for excision.<sup>15</sup>

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