Masson’s Tumor Presenting as an Asymptomatic Nodule on Lower Lip in a 30-Year-Old Male

Sir,

Masson’s tumor, also known as intravascular papillary endothelial hyperplasia (IPEH), is a benign tumor of the skin comprising reactive hyperplasia of intravascular endothelial cells in the vicinity of an organized thrombus. This tumor was first described by Masson in 1923 and was named as hemangioendotheliome vegetant intravasculaire. Since then, it has been variously named as endovascularite proliferante thrombopoietique, intravenous atypical vascular proliferation, intravascular angiomatosis, etc.[1]

Our case is of a 30-year-old male who presented with an asymptomatic erythematous papule on the lower border of the lower lip since 13 years. He did not complain of any discomfort due to the swelling, however, on pricking the lesion with a common pin there was oozing of blood, which he did purposefully on one or two occasions in an attempt to get rid of it. On examination, the lesion was soft in consistency and nontender. The surrounding area was normal. Submental and submandibular lymph nodes were not enlarged. Differential diagnoses of mucous cyst, vascular polyp, and venous lake were kept [Figure 1].

The lesion was surgically excised and sent for histopathological examination, which revealed a dilated vascular space in the submucosa with an organized thrombus and papillary hyperplasia of endothelial cells on one side. A final diagnosis of IPEH or Masson’s tumor in a venous lake of lip was made [Figures 2 and 3].

IPEH is a reactive phenomenon occurring usually in association with a venous dilatation or any other vascular channel.[3] Hashimoto[2] classified this entity into three types as “pure,” “mixed,” and “extravascular.” Pure type (55.8%)
arises de novo in a dilated vascular space with no causative comorbidity. Mixed (39.9%) type occurs superimposed over a pre-existing vascular anomaly such as arteriovenous malformations and hemangiomas associated with venous thrombosis. Extravascular type (4.3%) is primarily associated with trauma induced hematoma formation. Our case falls in the category of mixed type of IPEH as it was in the vicinity of an organized thrombus.

Histopathology of this lesion is classical with masses of papillary structures associated with a thrombus within the lumen of a vessel. Each papillary frond has fibrin or collagenous connective tissue as its core and is lined by plump endothelial cells. Mitotic figures may be present. Atypia and necrosis may or may not be present.\(^2\)

The pathogenesis of this tumor is debatable. Most favoured considerations include benign neoplastic process, with endothelial cell proliferation and papillary formation in the vascular lumen undergoing degeneration and necrosis in the manner of a red infarct, a reactive process of endothelial cells induced by blood stasis and perivascular inflammation, a benign endothelial proliferation arising from a thrombus as a variant of angiolymphoid hyperplasia with eosinophilia, and a pseudotumoral lesion caused by endothelial proliferation with papillary formation preceded by a thrombotic material, which serves as a developmental material.\(^3\)

Closest histopathological differential of IPEH is angiosarcoma.\(^4\) The characteristics of IPEH which differentiates it from angiosarcoma include circumscribed lesion, intraluminal location, papillary formation related to a thrombus, fibrohyalinized core of papillae, one or two layers of endothelial cells, hyperchromatic endothelial cells may be present, not true endothelial fronds, uncommon piling up of endothelium, obscure cellular pleomorphism, rare mitotic activity, rare necrosis, along with absence of irregular capillary vessels.\(^3\)

Masson’s tumor is more frequent in females, and very few cases have been reported in and around the oral cavity, with the most common location being the lower lip and the least being the angle of the mouth.\(^4\) Treatment is surgical excision with healthy margins. We report this case since Masson’s tumor in venous lake of lip is not a very common entity.

**Declaration of patient consent**

The authors certify that they have obtained all appropriate patient consent forms. In the form the patient(s) has/have given his/her/their consent for his/her/their images and other clinical information to be reported in the journal. The patients understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.
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Immunohistochemical Expression of Wt-1 Helps to Differentiate Cutaneous Vascular Tumors from Vascular Malformations

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