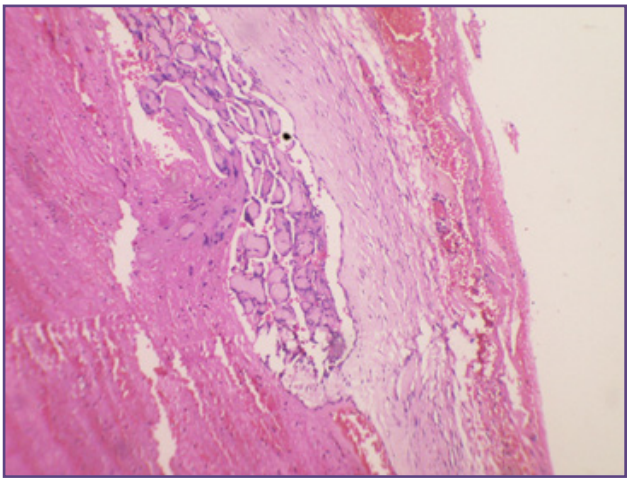

Fig. 1 : Low power view showing Large blood vessels filled with organizing thrombus showing papillations at the periphery.

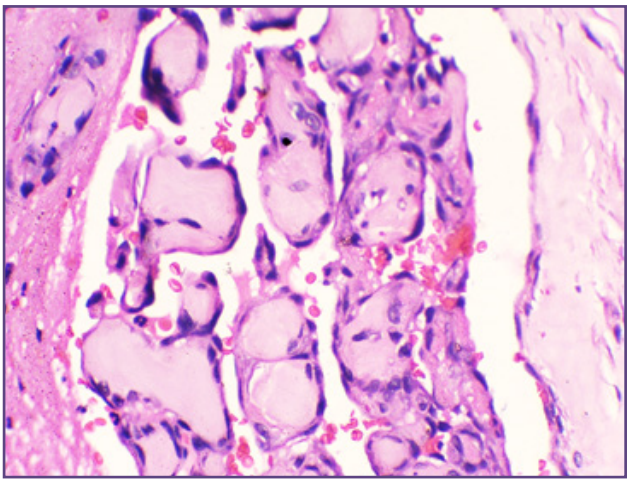

Fig. 2: High power view showing hobnail plump endothelial cells.

Fig. 3: Van Gieson Stain showing organizing thrombus with papillae.

that does not belong to either of the first two categories, and has an extravascular origin. [6] However, these different pathological forms do not carry any clinical importance, since the treatment is total excision.

Histopathology is essential and helpful for the diagnosis of this lesion. The papillary structure and exuberant endothelial proliferation of IPEH requires ruling out the much more common angiosarcoma.

Masson's lesion is often well circumscribed or encapsulated; the proliferative process is exclusively limited to the intravascular spaces; Papillary stalks composed of fibro-hyalinized(deeply eosinophilic) tissue of two or more endothelial cell layers The endothelial cells are hyperchromatic, but extreme nuclear atypia and frequent mitotic figures will not be seen; There may be pseudo channels, but there are no irregular or anastomosing blood vessels in the stroma[7] ;residual organizing thrombi is usually seen.

Angiosarcoma usually invades tissues outside the vascular channels. The papillae are covered by more than one or two layers of endothelial cells. Malignant features such as mitotic figures, necrosis, and nuclear pleomorphism can be seen on cytology. [8]

Immunohistochemistry may be required only if the endothelial origin of the lesion is in doubt. In such scenarios, endothelial cell markers, which would highlight the endothelial lining around the papillary tufts such as von Willebrand factor, CD31, factor XIIIa, and CD43 may be used. [9]

Simple excision is usually curative, although recurrence has been described.[10] Treatment of the lesion consists of conservative surgical excision with good outcomes in all cases except intracranial lesions, which have been reported to be fatal. [11]

Conclusion

The importance of IPEH or Masson's hemangioma lies in the fact that histopathology plays a vital role in the diagnosis of this benign lesion. It is also essential to differentiate IPEH from Angiosarcoma to avoid unnecessary surgery and radiation. [12]

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Competing Interests

None

Reference

1. Tedla M, Bežová M, Biró C, et al. Intravascular papillary endothelial hyperplasia of larynx: case report and literature review of all head and neck cases. Otolaryngol Pol. 2014; 68:200–203.
2. Albrecht S, Kahn HJ. Immunohistochemistry of intravascular papillary endothelial hyperplasia. J Cutan Pathol. 1990;17(1):16-21.
3. Yücesoy C, Coban G, Yilmazer D, Oztürk E, HekimogluB. Intravascular papillary endothelial hyperplasia (Masson's hemangioma) presenting as a lateral neck mass. JBR BTR 2009; 92:20 2.
4. Clearkin KP, Enzinger FM. Intravascular papillary endothelial hyperplasia. Arch Pathol Lab Med 1976;100:441.
5. Hashimoto H, Daimaru Y, Enjoji M. Intravascular papillary endothelial hyperplasia. A clinicopathologic study of 91 cases. Am J Dermatopathol 1983;5:539-46.
6. Gill M, Batra A, Jain D, Gupta V, Sen R, Gupta S. Intravascular papillary endothelial hyperplasia (Masson's Hemangioma) presenting as soft tissue mass in left scapular region-An unusual presentation. J Interdiscipl Histopathol. 2014;2(3):179-83.
7. Korkolis DP, Papaevangelou M, Koulaxouzidis G, Zirganos N, Psichogiou H, Vassilopoulos PP. Intravascular papillary endothelial hyperplasia (Masson's hemangioma) presenting as a soft-tissue sarcoma. Anticancer Res. 2005;25(2B):1409-12.
8. Shields JA, Shields CL, Eagle RC Jr, Diniz W. Intravascular papillary endothelial hyperplasia with presumed bilateral orbital varices. Arch Ophthalmol 1999;117:1247 9.
9. Mahapatra QS, Sahai K, Malik A, Mani NS. Intravascular papillary endothelial hyperplasia: An unusual histopathological entity. Indian Dermatol Online J 2015;6:277-9.
10. O. Sangueza and L. Requena, Hyperkeratotic vascular stains in: Pathology of Vascular Skin Lesions, Humana Press, EUA, 2003.
11. C.-S. Shih, R. Burgett, J. Bonnin, J. Boaz, and C. Y. Ho, "Intracranial Masson tumor: case report and literature review," Journal of Neuro-Oncology, vol. 108, no. 1, pp. 211–217, 2012.
12. C. Tokyol, Y. Demir, and F. Aktepe, "Cutaneous intravascular papillary endothelial hyperplasia of the hand: a case report and review of the literature," The Turkish Journal of Pediatrics, vol. 47, no. 1, pp. 71–74, 2005.

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