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Case Report: Intravascular Papillary Endothelial Hyperplasia In An Older Man

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Abstract: Masson's tumor is a benign tumor consisting of reactive proliferation of endothelial cells. It was first described by the French doctor, Pierre Masson, in 1923. A higher incidence was observed among women (1.3:1), and the average age at which it occurs is 31 years. It appears as a firm mass, with the appearance of a nodule or papule, located subcutaneously. The adjacent integument is bluish or reddish. On palpation it can be sensitive or painless. We will present the case of an 81-year-old man with Masson's tumor located at the level of the volar side of the left forearm, at the level of the flexor ulnar muscle of the carpi, which affects the ulnar artery.

Keywords: Intravascular papillary endothelial hyperplasia, Masson's tumor, ulnar artery

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Introduction: Masson's tumor or IPEH (Intravascular papillary endothelial hyperplasia) is a rare benign tumor. It is the consequence of a reactive proliferation of unknown cause. Frequent in the extremities such as: head, neck, upper limbs. Microscopically it is evident intraluminal proliferation of papillary structures showing a fibrin or a connective-fibrous axis. The papillae are covered by a single layer of endothelial cells, rare nuclear atypia and mitotic figures can be observed. It is associated with thrombi of different sizes, in different stages of organization. Three types have been described: primary, secondary (mixed), extravascular. The mixed form is associated with arterio-venous malformations and pyogenic granulomas. The extravascular form is associated with hematomas.

Materials and Methods: The piece studied comes from a patient admitted to the Department of Plastic and Reparative Surgery at the Braila County Emergency Clinical Hospital. Following the subjective and objective clinical examination, as well as based on the paraclinical investigations, he was hospitalized with the clinical diagnosis of Malignant tumor of the connective tissue.

The piece was studied based on the anatomopathological examination in the Pathological Anatomy laboratory of the same hospital. The macroscopic examination of the parts was followed by their processing in successive stages up to the stage of permanent histopathological preparation.

Thus, the macroscopic evaluation was immediately followed by fixing the pieces in 10% formaldehyde solution for 24 hours. For routine histopathological examination, the material was subjected to hematoxylin-eosin staining. Later, the material was subjected to immunohistochemical examination and the following markers were used: CD31, CD34 and ki-67.

Case presentation: An 81-year-old patient presented to the Department of Plastic and Reconstructive Surgery with a tumor formation on the volar side of the left forearm, at the level of the flexor carpi ulnar muscle. The excised piece is 5/3/1, which includes a blood vessel, with a brownish-purple appearance on the section. Ultrasound describes a well-defined macronodular formation a heterogeneous structure, predominantly hypoechoic, with large vascular spaces. Near, muco-tendinous and vascular structures appear slightly compressed by mass effect.

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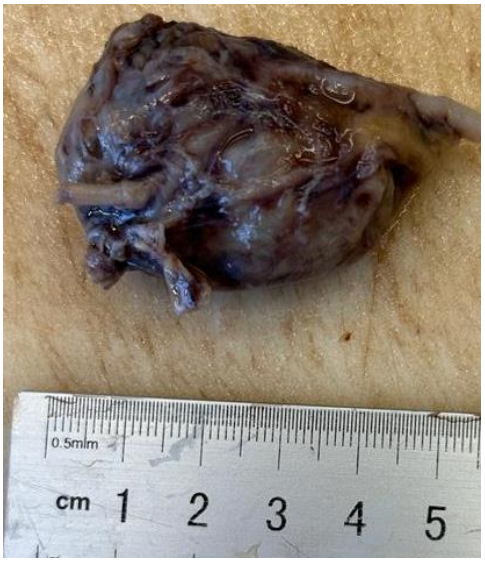

Fig.1 Surgical resection piece. Original image

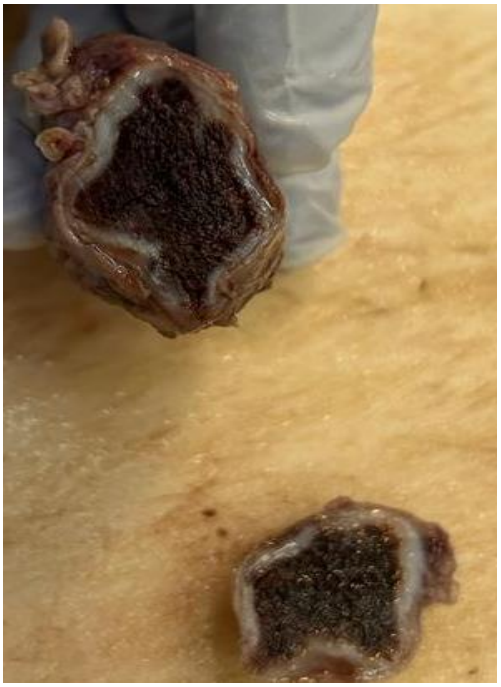

Fig. 2 Surgical resection piece, section view. Original image

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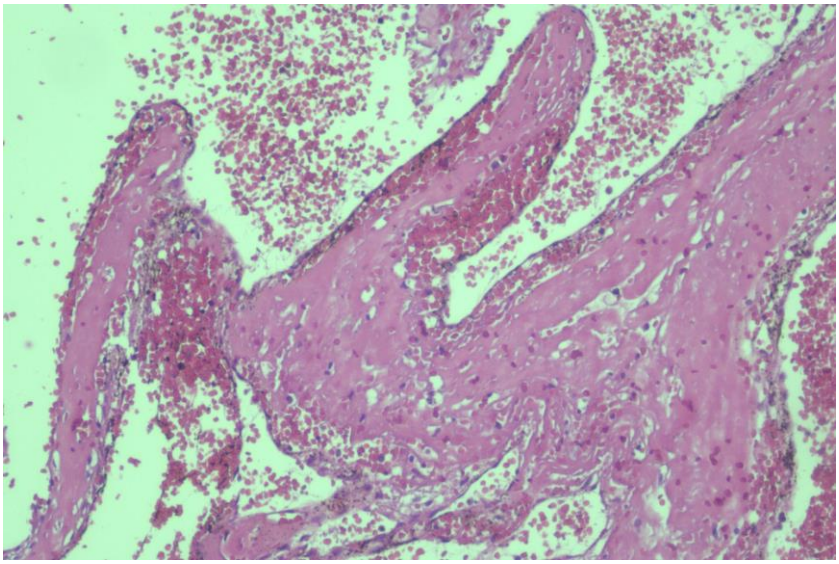

Fig.3 Papillary proliferation covered by endothelium. HE staining. Magnification x4. Original image

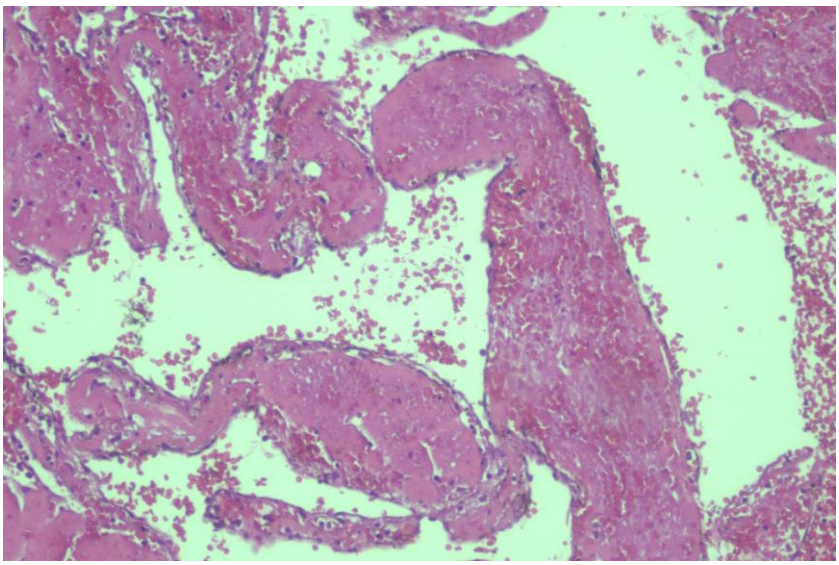

Fig.4 Papillary proliferation covered by endothelium. HE staining. Magnification x10. Original image

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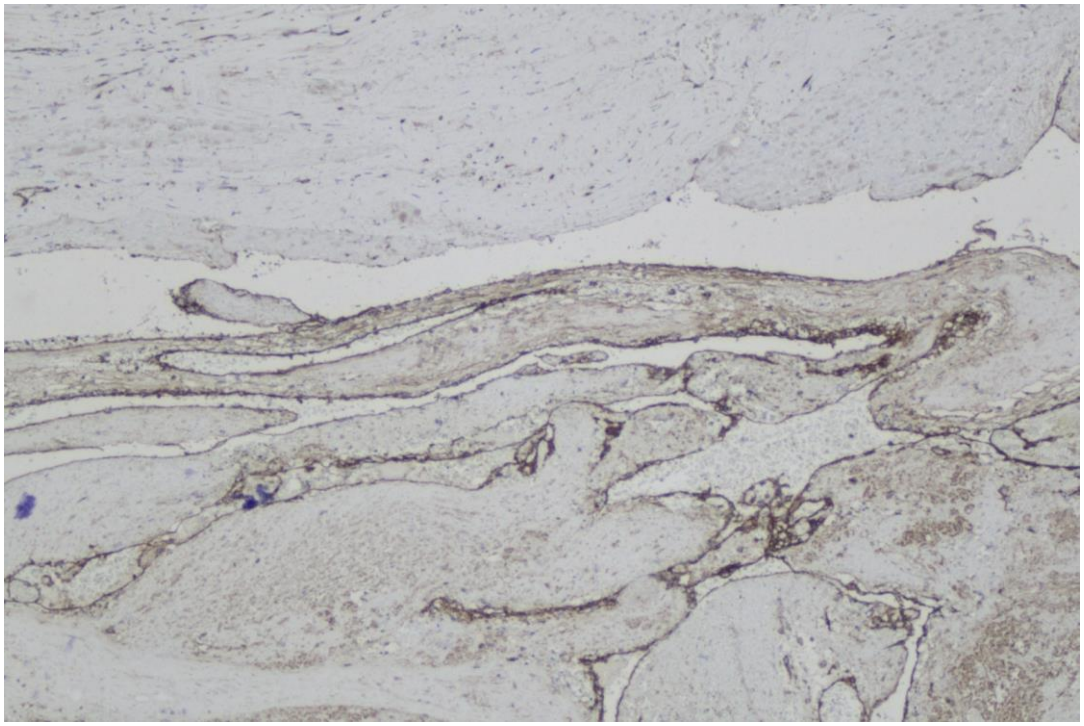

Fig. 5 CD31 x4. Original image

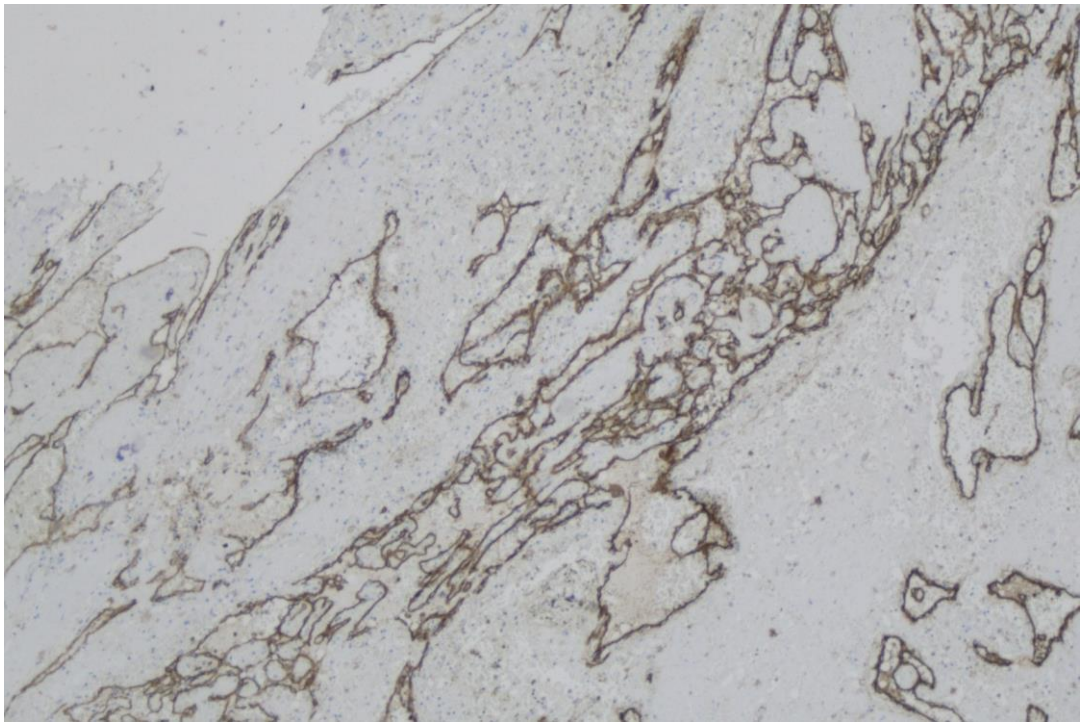

Fig. 6 CD34 x4. Original image

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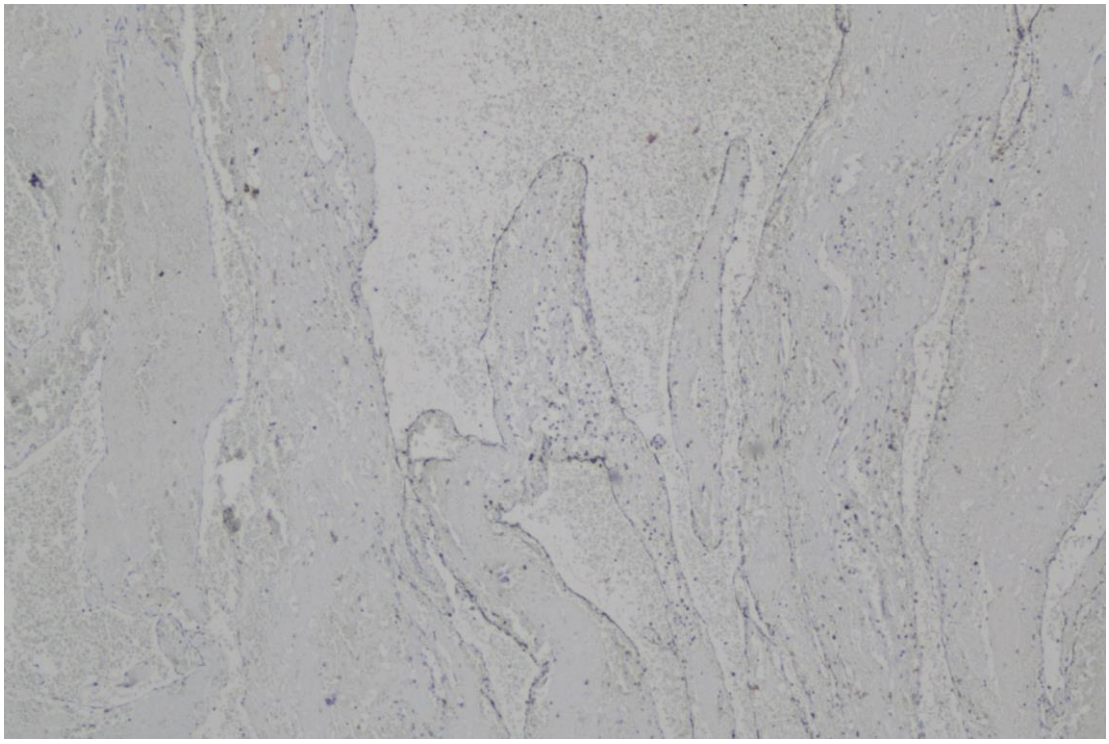

Fig. 7 ki-67 x10. Original image

Conclusions: Masson's tumor is a rare benign tumor, it has a good prognosis and is more common among women. From a macroscopic point of view, the differential diagnosis is made with angiosarcoma. Microscopically, the diagnosis is made with an organized thrombus and Dabska's disease. Surgery represented the curative treatment, the risk of recurrence is low.

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