

RF3 An Unusual Presentation of an Epithelioid Hemangioma Arising from an Arteriovenous Malformation of the Brachial Artery

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OBJECTIVES: Epithelioid hemangiomas (EH) are benign, vascular tumors characterized by the proliferation of epithelioid endothelial cells with abundant eosinophilic hyaline cytoplasm. We report a large, symptomatic epithelioid hemangioma of the arm with an arteriovenous malformation of the brachial artery. Whether these present as a true neoplasm or reactive lesion is controversial and unresolved in the literature. The association of EH with arteriovenous malformations is extremely rare.

METHODS: A healthy 39 year old white male financial planner presented to the vascular clinic with paresthesias of his left hand and a pulsatile mass in his arm. He had been seen by a Dermatologist several times for multiple reddish-brown lesions on his left upper arm over the deltoid region. Histopathology of these lesions showed angiolymphoid hyperplasia with eosinophilia. The lesions promptly recurred after each treatment. Over 3 years of treatment, the lesions progressed and he developed paresthesias in his left hand. He was then referred for an MRI.

Subsequent workup included MRI and duplex ultrasonography which revealed the lesion depicted in figures 1 and 2. The MRI suggested a highly vascular lesion and the ultrasound suggested close approximation of the mass to the radial nerve. Physical examination in the vascular clinic revealed a painless mass of the arm without evidence of motor or sensory deficits. He had a few small (3-5mm) reddish-brown papules over the anterior and lateral surface of the skin overlying the deltoid muscle. Based on the previous workup and examination, an angiogram was performed (figure 3).

RESULTS: Through a medial arm incision that was extend into the axilla for proximal brachial artery control, the mass was identified. A single macrofistulous branch of the brachial artery was ligated (figure 4) to enhance exposure. Since the histopathologic diagnosis was in question, a posterior incision was made. The triceps was split along its fibers and the mass was freed posteriorly.

CONCLUSIONS: The operation was successful and the patient's symptoms resolved. Final pathology showed an AVM with areas of epithelioid hemangioma. (figure 5) This is a unique case where the etiology is both potentially reactive and neoplastic. Long term follow up will be required to ascertain regression of the cutaneous lesions.

