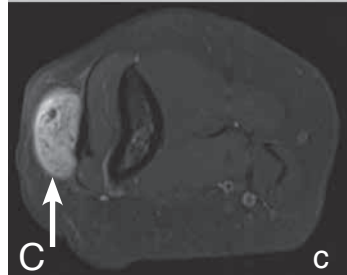
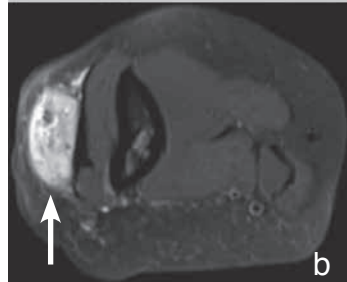
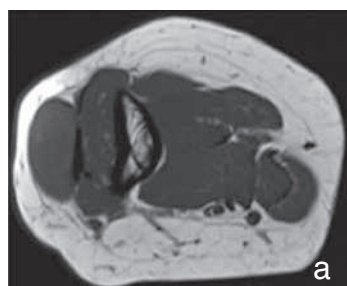
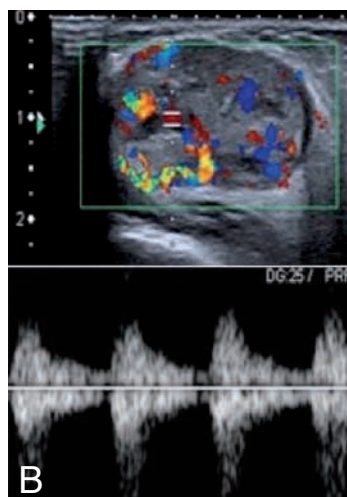
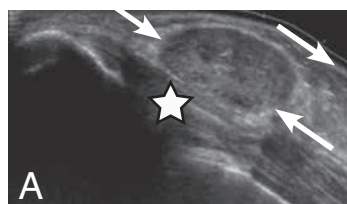


IMAGES IN CLINICAL RADIOLOGY



Angioleiomyoma of the elbow

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A 35-year-old patient was referred for ultrasound assessment of a non-painful tumor under the skin of the posterior surface of the elbow. Ultrasonography shows a well-circumscribed mass located in the fatty tissue under the skin in contact with the medial portion of the triceps tendon (Fig. A), with arterial signal on color Doppler (Fig. B). MRI report shows a well-circumscribed relatively homogeneous mass against the triceps tendon, with high signal intensity on T2-weighted sequences and some areas of low signal intensity corresponding either to fibrous tissue or vascular flow. On T1-weighted sequence, the mass appears hypointense or isointense homogeneously and clearly enhances with a Gadolinium contrast agent (Fig. C). An ultrasound guided biopsy is performed: pathological examination showed morphological and immunophenotypic aspects in favor of a vascular leiomyoma or angioleiomyoma with no criteria of malignancy. Complete excision of the lesion was performed without any complication.

Comment

Angioleiomyoma is a benign tumor of smooth muscle that originates in the tunica media of the veins.

It often affects middle-aged or young adults and are extremely rare in children. It can occur anywhere in the body but is most often seen in the extremities, particularly the lower leg. It can be located in the dermis, the subcutaneous fat, or the superficial fasciae of the extremities. The most common complaint is the presence of a mass. Pain is manifested in approximately 60 % of patients. The lesions occur more frequently in women than in men, and pregnancy may increase the severity of pain. Small nerve fibers may be present in the stroma or walls of these tumors; some investigators have hypothesized that such nerve fibers may be the source of pain. Complete excision of the lesion is the treatment of choice.

Little information regarding the MR imaging appearance of angioleiomyoma is available. In the few cases described in the literature, angioleiomyoma appears as a well-circumscribed mass isointense to muscle on T1-weighted images (Fig. C a), with heterogeneous high signal intensity on T2-weighted images (Fig. C b), an homogeneous strong enhancement with a gadolinium contrast agent (Fig. C c). The tumor may contain dystrophic calcifications that can be visible at radiography and MR imaging as foci of low signal intensity.

Reference

1. Blacksin M.F., Ha D.H., Hameed M., Aisner S.: Superficial soft-tissue masses of the extremities. *Radiographics*. 2006, 26: 1289-1304.

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