Images in Clinical Rheumatology

Intravascular Papillary Endothelial Hyperplasia: Sonographic and Magnetic Resonance Imaging Appearance With Histopathologic Correlation

Hiperplasia endotelial papilar intravascular: apariencia ecográfica y en resonancia magnética con correlación histopatológica

Raquel Sánchez-Oro, Juan Manuel Sanchís-García, Marcos Saravia, Marta Bértolo-Domínguez

Servicios de Radiodiagnóstico, Hospital General de Requena, Requena, Valencia, Spain
Servicio de Radiodiagnóstico, Hospital Clínico Universitario de Valencia, Valencia, Spain
Servicio de Anatomía Patológica, Hospital Clínico Universitario de Valencia, Valencia, Spain

ARTICLE INFO

Article history:
Received 22 March 2015
Accepted 19 June 2015
Available online 4 April 2016

We report the case of a 59-year-old woman who presented with a mildly painful, bluish nodular lesion located in the connective tissue adjacent to the metacarpophalangeal joint of the first finger on her left hand. Soft tissue ultrasound (Fig. 1A and B) showed a turbulent vascular flow within the lesion, with a low-resistance arterial waveform and an afferent arterial branch that reached toward the lesion described above. Magnetic resonance imaging (MRI) (Fig. 1C) identified the lesion as being hyperintense (arrow) on a fat-saturated T2-weighted sequence. These findings suggested a vascular lesion and, when asked, the patient confirmed that she had had a prior traumatic injury. Thus, the possibility of a posttraumatic pseudoaneurysm or a hemangioma was considered. After surgical removal of the lesion, the pathological analysis of the resected specimen (Fig. 1D) showed numerous vascular spaces, surrounded by an endothelium in which nothing atypical was observed, lying on a stroma with hyalinized papillae. An immunohistochemical study with the anti-CD34 antibody confirmed the vascular differentiation of the lesion. The histopathological findings corresponded to an intravascular papillary endothelial hyperplasia, also known as Masson’s hemangioma or Masson’s tumor.

Intravascular papillary endothelial hyperplasia is a proliferative vascular lesion, generally formed in response to traumatic injury, that represents 2%–4% of the vascular soft tissue tumors. It occurs more frequently in women than in men, although its incidence does not differ according to age range or race. Three types have been distinguished on the basis of Hashimoto’s classification: primary, which develops in dilated vascular spaces; mixed, which occurs in existing vascular anomalies, such as hemangiomas, arteriovenous malformations and pyogenic granulomas; and the third, a rare, extravascular type that develops in the interior of a hematoma. The typical sites of this lesion are the subcutaneous vessels of the head, neck, fingers and trunk. The treatment of choice is complete surgical resection, because these masses do not usually resolve spontaneously.

Ethical disclosures

Protection of human and animal subjects. The authors declare that no experiments were performed on humans or animals for this study.

Confidentiality of data. The authors declare that no patient data appear in this article.


* Corresponding author.
E-mail address: raquel.sanchez_oro@hotmail.com (R. Sánchez-Oro).
Right to privacy and informed consent. The authors declare that no patient data appear in this article.

Conflicts of Interest

The authors declare they have no conflicts of interest.

References


