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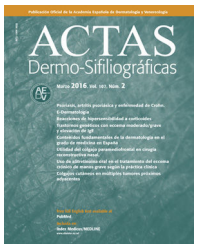

CASE FOR DIAGNOSIS

Lobulated Lesions on the Fingers☆

Lesiones lobuladas en los dedos de la mano

Medical History

The patient was a 5-year-old girl with no history of interest who came to the clinic with swollen lesions on the dorsum of the fingers of her right hand. Some were congenital and others had appeared later. The lesions sometimes increased in volume, took on a violaceous color, and became painful.

Physical Examination

Physical examination revealed the presence of lobulated lesions on the dorsum of the second, third, and fourth fingers that were flesh-colored and easily compressed (Fig. 1). They were not painful, and the local temperature was not increased.

Histopathology

An incisional biopsy of one of the lesions was performed. Analysis of the specimen revealed dilated vascular structures with irregular edges in the dermis; these structures were covered with a row of endothelial cells and contained eosinophilic material (Fig. 2).

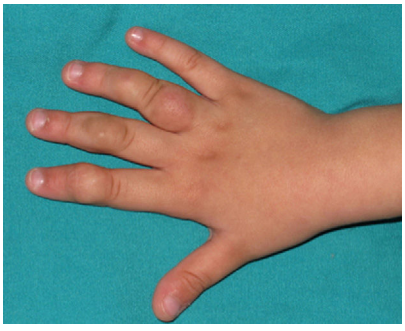

Figure 1

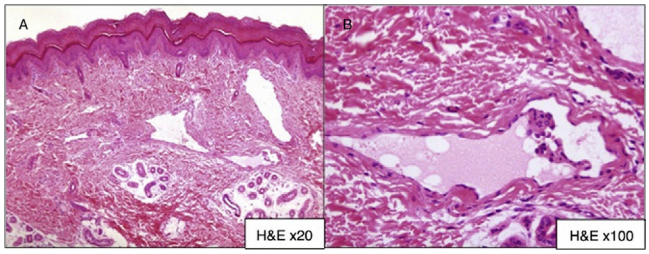

Figure 2 A, Hematoxylin-eosin ×20. B, Hematoxylin-eosin ×100.

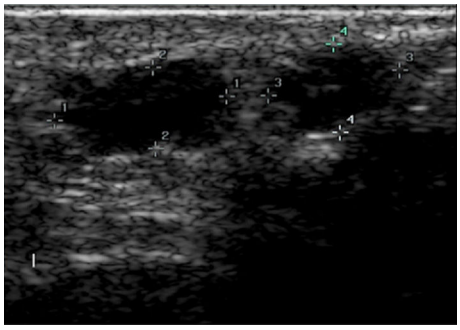

Figure 3

Additional Tests

Doppler ultrasound and magnetic resonance were also ordered. Doppler ultrasound revealed the presence of anechoic structures separated by thick septa (Fig. 3). Magnetic resonance revealed the presence of a multilocular cystic mass that was hypointense in T1-weighted sequences and hyperintense in T2-weighted sequences.

What is your diagnosis?

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Diagnosis

Lymphatic malformation.

Clinical Course and Treatment

We decided to start sclerotherapy. Aspiration of the lesions yielded lymphatic fluid. Subsequent intralesional infiltrations of doxycycline led to a partial response.

Comment

Lymphatic malformations are abnormalities of the lymphatic system that comprise abnormal lymphatic vessels and cystic structures that vary in size and shape.[1] Several classifications are used, the most common being that which divides malformations into diffuse and localized and, depending on the size of the cyst, into macrocystic, microcystic, and combined forms.

The case we report is difficult to classify. However, given the size of most of the cystic spaces (>2 cc), the findings could be considered localized macrocystic malformation.

Macrocystic lymphatic malformations are present at birth in up to 50% of cases and rarely appear in adulthood. They manifest as solitary findings or, less commonly, as findings in the context of complex malformations.

The lesions usually appear on the neck or axillas, although they are occasionally found in the mediastinum, retroperitoneum, and pelvic region. They rarely appear on the upper extremities.[2] Clinically, they manifest as lobulated swellings that are easily compressed and do not adhere to deeper planes.

Doppler ultrasound and magnetic resonance can help to guide diagnosis. Doppler ultrasound reveals multilocular cystic structures separated by septa of varying thicknesses that are not visible on Doppler ultrasound. Magnetic resonance, which proves very useful for delimiting the lesion, reveals a multilocular cystic mass that is characteristically hypointense in T1-weighted sequences and hyperintense in T2-weighted sequences.[3]

Histology reveals dermal or subcutaneous lesions comprising dilated vascular spaces, whose opening is defined by a line of flattened endothelial cells that stain positive for podoplanin, Lyve-1, and Prox-1.

As for progress, the lesions tend to remain stable over time, and spontaneous regression is uncommon. The lesions may be complicated by inflammation, intracystic hemorrhage, or compression of neighboring structures,[4] which is a potentially severe complication in lesions in the neck or mediastinum.

The differential diagnosis includes venous or arteriovenous malformations, hemangiomas, and lipomatous, fibrous, or mesenchymal soft tissue tumors.

No protocols have been established for the treatment of this type of lesion, although laser therapy, radiation therapy, and sclerotherapy can be used. Sclerotherapy is the best option. The sclerosing agents used include hypertonic saline, lipiodol, bleomycin, and doxycycline, and results are variable.[5] Surgery is complex and is usually reserved as a complement to the other approaches.

We report this case because of its unusual location and clinical presentation.

Conflicts of Interest

The authors declare that they have no conflicts of interest.

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