CASE FOR DIAGNOSIS

Hypertrichotic Nodule on the Leg of a 3-year-old Child

Nódulo hipertricótico en la pierna de un niño de 3 años

Medical History

A 3-year-old child with no past history of interest was seen in the outpatient clinic for a skin lesion on the left leg. It was a congenital lesion that had increased progressively in size as the child grew. The child did not describe pain or sweating in the area of the lesion.

Physical Examination

Physical examination revealed a subcutaneous nodule with a diameter of 2 cm in the left prepatellar region; the overlying skin was pink and there was localized hypertrichosis. The nodule was firm but yielding and was mobile (Figure 1).

Histopathology

Histological study of a 4-mm punch biopsy obtained from the center of the lesion showed a proliferation of dilated, thin-walled vessels in the superficial and deep dermis, in intimate contact with an increased density of eccrine glands of normal size and morphology, a few hair follicles, and adipose tissue. There were no visible changes in the epidermis and no mitotic figures or cellular atypia (Figures 2 and 3).

What Is Your Diagnosis?
Diagnosis

Eccrine angiomatous hamartoma.

Clinical Course

As the lesion was asymptomatic, and with the family’s agreement, it was decided not to perform any treatment.

Discussion

Eccrine angiomatous hamartoma is a benign malformation of vascular and eccrine origin. It is a very rare condition that can be congenital or develop during adolescence; it has only occasionally been observed in adults.

Patients typically present a solitary plaque, nodule, or macule that grows progressively; however, multiple lesions do occur. The most common site is on the distal parts of the limbs, particularly the legs. The lesion may be red, violaceous, blue, brown, or skin-colored, and can occasionally resemble a vascular lesion. There may be associated hypertrichosis, as was found in our patient. The majority of cases are asymptomatic, although up to a third of subjects complain of pain or hyperhidrosis; these symptoms were not present in our patient. Familial forms have been reported.

The histopathological findings include an increase in the number of eccrine structures in the mid and deep dermis, adjacent to coils of dilated vessels, usually capillaries. The eccrine structures are well differentiated, but can be larger than normal. Collections of fatty tissue in the dermis have also been described, as well as hair follicles, hyperplastic nerves bundles, lymph vessels, and mucin. Epidermal changes including epidermal hyperplasia, papillomatosis, and hyperkeratosis are occasionally seen.

Eccrine angiomatous hamartoma usually has a benign prognosis and the growth of the lesion is proportional to that of the patient. Surgical excision is curative for symptomatic lesions. There have been occasional reports of spontaneous involution. To date, the presence of eccrine angiomatous hamartoma has not been associated with any other specific disease.

In our case the clinical differential diagnosis that we considered included all lesions associated with hypertrichosis and progressive growth. These traits have previously been described in lesions such as congenital hairy nevus, smooth muscle hamartoma, glomus tumor, tufted angioma, Becker nevus, fibrous hamartoma, connective tissue nevus, neurofibroma, and cutaneous meningioma. It was possible to exclude some of these diagnoses based on their specific clinical features, but the majority required histological study of the lesion. The main histopathological differential diagnosis is with eccrine nevus, a lesion characterized by hyperplastic eccrine glands with no associated capillary proliferation.

In summary, eccrine angiomatous hamartoma is a rare benign malformation formed of hyperplastic eccrine glands and vascular structures; it typically develops on the limb of a child. The presence of a firm, asymptomatic congenital nodule with associated hypertrichosis and that shows growth proportional to that of the child should suggest a diagnosis of eccrine angiomatous hamartoma.

Conflicts of Interest

The authors declare no conflicts of interest.

References


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