Eccrine angiomatous hamartoma

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ABSTRACT

Eccrine angiomatous hamartoma is a rare, benign skin tumor typically occurring on the hands and feet. It is usually congenital in origin but, less commonly, it may also appear later in life. Eccrine angiomatous hamartoma may appear in various colours and forms: a macule, papule, plaque or nodule, resembling angioma. Associated symptoms include hyperhidrosis within the lesion. Definitive diagnosis requires histopathological examination. The most characteristic microscopic features include eccrine glands hyperplasia, and vascular proliferation and dilatation. In most instances, eccrine angiomatous hamartoma does not necessitate treatment; however, surgical removal of the lesion might be recommended in specific cases. Other treatment options include botulinum toxin injections and laser therapy.

Key words: eccrine angiomatous hamartoma, nodule, congenital lesion, foot.

INTRODUCTION

Eccrine angiomatous hamartoma (EAH) is a rare tumour characterised by a complex structure [1]. It manifests as a solitary nodule or plaque, occasionally as a papule or pink-coloured macule due to the presence of dilated blood vessels, mimicking angioma [1]. The lesion varies in size, from 3 mm to 11 cm, and in colour. It may be reddish, bluish-brown, yellowish, violaceous or skin-coloured, depending on the number of vessels in relation to the hyperplasia of mature eccrine glands [2]. EAH is most typically located on the acral areas of the lower or upper extremities, particularly the palms or soles, but occasionally it may develop on the trunk, on the nape, and in the inguinal region [3–5]. In majority of cases, the lesion is congenital in origin. However, there are case reports in the literature describing the occurrence of EAH during the prepubertal period or in adulthood [4, 6]. Histopathology of the lesion reveals an increased number of normal eccrine glands alongside dilated blood vessels [3].

OBJECTIVE

To report the case of a young man with a nodular lesion located on the lateral surface of the foot since birth.

CASE REPORT

A 25-year-old patient presented to the dermatology outpatient clinic because of a solitary nodular lesion on the lateral surface of his left foot (fig. 1). The lesion had been present since birth and expanded in size during adolescence. It was accompanied by hyperhidrosis, which could be noticed on clinical examination. The patient denied any concomitant symptoms.

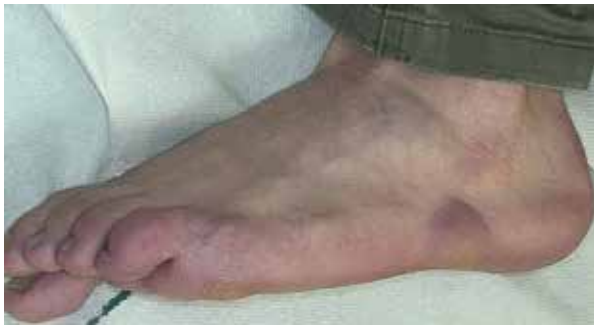

Figure 1. Nodular lesion on the lateral side of the left foot between the metatarsus and the heel

Figure 2. Dermoscopic image. Macerated and swollen epidermis over the eccrine glands openings (10×)

Figure 3. Dermoscopic image. Multiple eccrine glands openings. Depressions with a solid pink appearance visible between the papillary ridges (20×)

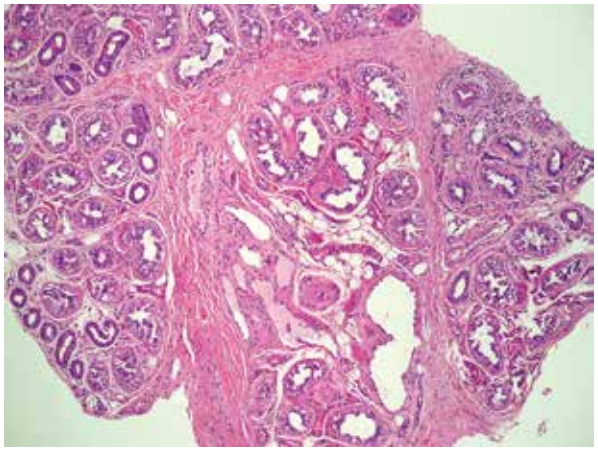

Figure 4. Histopathological image (H + E staining, 100×). Lobular hyperplasia of the eccrine glands with tubules. Numerous dilated and thin-walled postcapillary venules between the glandular lobules

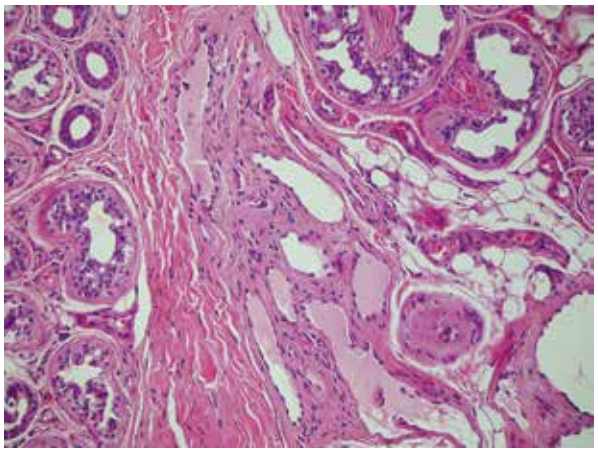

Figure 5. Histopathological image (H + E staining, 200×). Eccrine glands, tubules, and dilated thin-walled blood vessels consistent with the diagnosis of eccrine angiomatous hamartoma

During the diagnostic work-up, dermoscopy, mycological examination, and skin biopsy were performed. Dermoscopic evaluation revealed acrosynringia openings with macerated epidermis around, without any other pathological features (figs. 2, 3). Mycological assessment showed no fungal elements. Histopathology revealed proliferation of the eccrine glands and their ducts, and increased number of blood vessels with wide lumens, providing clues for the diagnosis of eccrine angiomatous hamartoma (figs. 4, 5).

DISCUSSION

The aetiology of EAH is not fully elucidated. The mechanism underlying EAH most likely involves a biochemical fault in the interactions between differentiating epithelium and adjacent mesenchyme, resulting in abnormal proliferation of adnexal and vascular structures [7]. The lesion may be asymptomatic or present with symptoms including pain, variations in temperature, and hyperhidrosis. In extraacral locations, hypertrichosis may be present [2]. As a rule, EAH requires no treatment [8, 9]. Topical botulinum toxin injections are used for the management of hyperhidrosis [10]. The lesion can be surgically removed for aesthetic purposes or to eliminate associated pain [11]. There have also been attempts to treat EAH with laser therapy [12].

Eccrine angiomatous hamartoma is a rare developmental hamartoma which requires differential diagnosis with vascular malformations, smooth muscle

hamartoma, tufted angioma, blue rubber bleb nevus or glomus tumour [13, 14].

CONCLUSIONS

In this report, we present a case of eccrine angiomatous hamartoma, a rare benign developmental tumour. The diagnosis is made on the basis of characteristic microscopic findings. In the majority of cases, patient management is limited to the diagnosis. Treatment or surgical removal of the lesion can also be performed depending on the accompanying symptoms and patient expectations.

CONFLICT OF INTEREST

The authors declare no conflict of interest.

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