Verrucous hemangioma
Hemangioma verrucoso

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Abstract: Verrucous Hemangioma is an uncommon vascular malformation, characterized by vascular proliferation and dilation from dermis to subcutaneous tissue, and proliferative reaction of the epidermis. The authors report a case of verrucous hemangioma, making a brief review of its clinical, histopathological and therapeutic aspects.

Keywords: Arteriovenous malformation; Hemangioma; Therapeutics

INTRODUCTION

Verrucous hemangioma is an uncommon vascular malformation, sometimes clinically mistaken for circumscribed angiokeratoma. Its usual onset is at birth or beginning of childhood, as a plane lesion, which tends to grow proportionally to body development throughout the following years. It characteristically presents as vascular papules, plaques or nodules of bluish color, with verrucous surface and linear disposition, unilateral and are usually located in the lower limbs. Histologically, it displays increased vascularization from dermis to subcutaneous tissue, and relapse is common after conventional treatment with criotherapy or electrocoagulation.

The authors report a case of verrucous hemangioma affecting the forearm, an unusual location.

CASE REPORT

Twenty-three-year-old brown-skinned female patient, born in and coming from Santa Maria da Boa Vista, PE, who reported asymptomatic lesions with onset 10 years before, located in the right forearm, and with progressive growth. She denied previous treatments. Upon dermatological examination, she presented erythemeatic-violet tumoral lesions, with verrucous surface and arcuate arrangement and atrophic scar center, disposed linearly along the extensor surface of right hand and forearm (Figures 1, 2 and 3). Anatomopathological examination (Figures 4 and 5) of a lesion fragment revealed maked hyperkeratosis, irregular acanthosis, papillomatosis and vascular proliferation in the superficial dermis extending deep in the subcutaneous tissue. Based on these histological findings, the diagnosis of verrucous hemangioma was established, and the patient was referred for deep exeresis of the lesion.
DISCUSSION

Verrucous hemangioma is an uncommon condition, which has been described in the literature under various names, including unilateral neviform hemangioma, unilateral verrucous hemangioma, unilateral vascular nevus and angiokeratotic nevus.¹

The lesion appears as well-circumscribed erythematic-bluish maculas, which increase in size with time, acquiring an erythematic-violet color, and its surface becoming verrucous and hyperkeratotic.¹ Such verrucous hyperkeratotic aspect of the lesion is considered to be a reaction to injuries, such as trauma or infection.⁵,⁶,⁹

Unlike the present patient, who presented lesions in the forearm, in around 95% of cases, verrucous hemangioma is located in the lower extremities.⁴ Histopathologically, it is characterized by the presence of angiomatous proliferation with dilated vessels extending down to reticular dermis and subcutaneous tissue (Figure 5).⁵,⁶ Epidermis displays papillomatosis, acanthosis and hyperkeratosis in varied degrees, and atrophy may be found in some areas (Figure 4).²,⁶,¹⁰ Hematic or meliceric crusts may be

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FIGURE 1, 2 e 3: Erythematic-violet lesions with verrucous surface, located in right hand and forearm

FIGURE 4: Epidermis displaying papillomatosis, acanthosis and hyperkeratosis in varied degrees

FIGURE 5: Angiomatous proliferation extending to reticular dermis and subcutaneous tissue
found in the horny layer, indicating previous trauma or secondary infection, as fibrosis and elastic fiber fragmentation, occasionally observed in the dermis, may also indicate. An important differential diagnosis of verrucous hemangioma is circumscribed angiokeratoma, essentially a vascular ectasis that is usually observed in the lower limbs, more commonly in women. Despite the clinical and histological similarities, the latter can be distinguished from verrucous hemangioma because the vascular component is restricted to the superficial dermis.

In contrast to circumscribed angiokeratoma, verrucous hemangioma does not respond well to most usual physical treatments, such as cryotherapy, electrocoagulation and laser therapy, presenting frequent relapses. This is due to its extension down to the subcutaneous tissue, which requires deep and wide excision or, in cases with larger lesions, excision followed by skin grafting.

For these reasons, early diagnosis and surgical interventions, with exeresis of lesions that are still reduced in size, are fundamental for obtaining a better cosmetic result.