



Nodular Hidradenoma Case of Rare Localization

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Abstract

Hidradenoma is a rare benign adnexal sweat gland tumor with eccrine or apocrine differentiation. In the skin, it is usually in the form of a solitary skin nodule. The treatment is complete surgical resection with healthy margins, given the high rate of recurrence and the possibility of malignant transformation. We report a case.

Keywords

Nodular Hidradenoma; Anterior Part of the Leg; Rare; Histology

Abbreviations

NH: Nodular Hidradenoma

Introduction

Nodular hidradenoma (NH) is a benign adnexal tumor that originates from the distal excretory duct of eccrine or apocrine sweat glands [1], which is uncommon, accounting for 1% of all skin tumors. In two of the largest series reporting 32 and 38 cases of hidradenomas, only two were located in the foot, and more than half in the trunk. We report a case at the level of the leg.

Case Report

This is a 77-year-old patient, with no notable pathological history, consulting for an asymptomatic nodule evolving for 30 years, gradually increasing in size, becoming ulcerated and painful with serous fluid on the pressure. The patient did not report any history of trauma. The dermatological examination found a purplish nodule sitting on the anterior surface of the smooth-surfaced right leg about 4 cm



Fig-1:

Purplish nodule on the anterior surface of the right leg, 4cm long, ulcerated in the center.

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long, ulcerated in the center (**Fig-1**). Dermoscopy showed a nodule with whitish and purplish amorphous areas and eccentric ulceration (**Fig-2,3**)

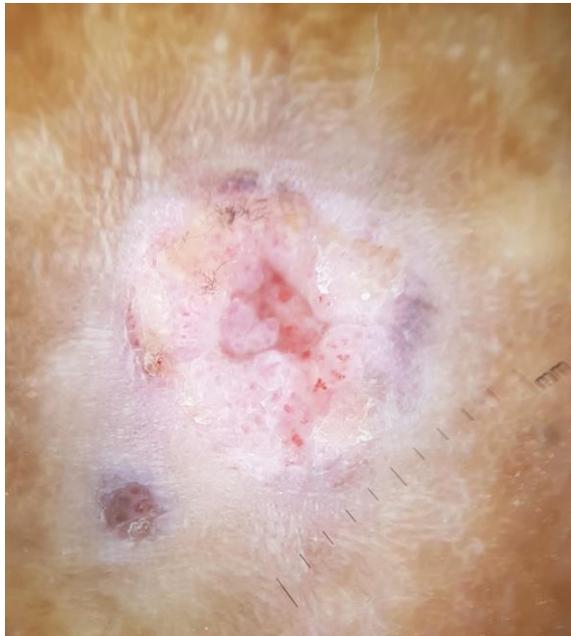


Fig-2:
Dermoscopic image showing a nodule with whitish and purplish amorphous areas.



Fig-3:
Extension of ulceration after skin biopsy.

as well as hairpin vessels (**Fig-4**). The rest of the somatic examination was peculiar. The biological assessment and the x-ray of the leg were normal. The histological study showed a rather limited but not encapsulated nodular proliferation in the dermis, composed of small monomorphic round basaloid cells (**Fig-5**) with ductular structures within the lesion sometimes dilated cystic and lined with cytoplasmic cuboid cells. acidophilus sometimes underlined by



Fig-4:
Dermoscopic image showing hairpin vessels

fine acidophilic cuticles (**Fig-6,7**), the cystic content is made of loose amorphous material and the lesion evolves within an abundant fibrohyaline stroma sheltering some mononuclear inflammatory elements in favor of a nodular hidradenoma. Complete excision of the lesion was made because of the risk of

transformation into hidradenocarcinoma.

Discussion

Hidradenoma is a rare benign tumor of the distal part of the sweat glands. It is suggested that this

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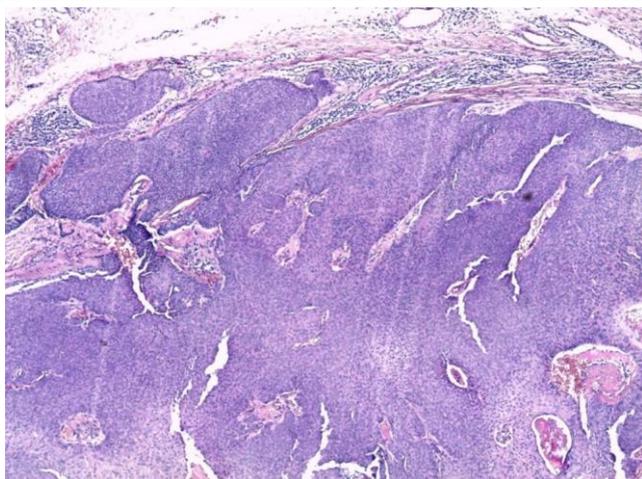


Fig-5:
Histopathological picture of nodular hidradenoma showing lobulated proliferation of monomorphic basaloid cells in a fibrohyalin stroma (HES stain G x 50)

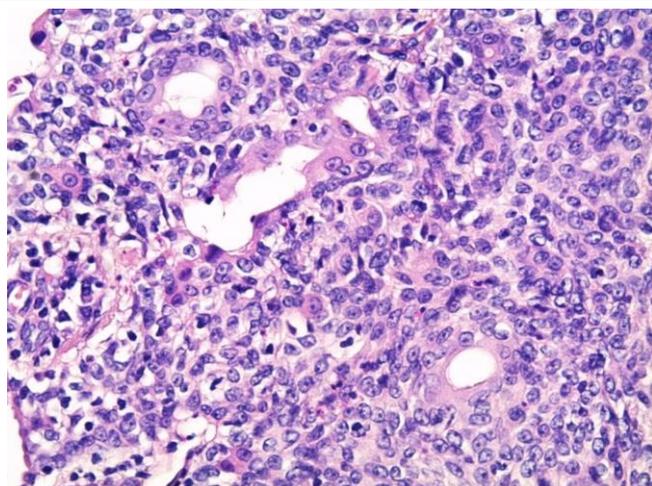


Fig-6:
Histopathological picture of nodular hidradenoma showing small ductules within proliferation. (HES stain G x 400)

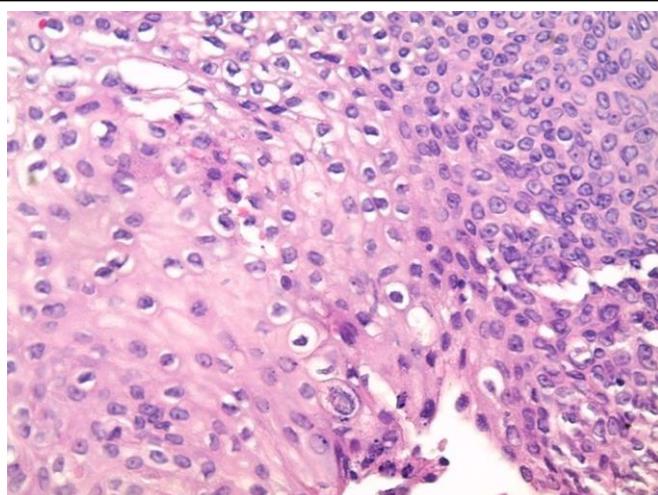


Fig-7:
Histopathological picture of nodular hidradenoma showing focal point of squamous differentiation. (HES stain G x 400)

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tumor most often originates from the apocrine glands and not from the eccrine gland as previously thought [2]. The clinical aspect is that of an asymptomatic nodule of 0.5 to 2 cm in size, firm, and unique consistency, most often seen on the scalp. It affects the young adult between 20 and 50 years with a clear female predominance that is not the case in our observation. The overlying skin usually has a brown-red or shiny surface, but in some cases, ulceration is observed. The dermoscopic examination shows a defined nodule with whitish amorphous areas and reddish-purple, with linear vessels and hairpin [3]. A case report has previously documented a homogeneous blue pattern in a cystic lesion resulting from the Tyndall effect [4]. Due to the variability in clinical and dermoscopic features, a histological study confirming the diagnosis is required to eliminate other differential diagnoses. Many histological varieties are described, usually, the epidermis is often normal with a tumor well-circumscribed and not encapsulated in the dermis [5,6]. The nodular type shows apocrine differentiation with polyhedral cells, squamous, mucinous and clear. These cells are arranged in nests in a ductal model. However, if they degenerate, cysts form. Characteristics for identifying apocrine differentiation include decapitation secretion, mucinous secretion, and sebaceous metaplasia. Although immunohistochemical dyes help confirm the diagnosis - such as epithelial membrane antigen, carcinoembryonic antigen, and cytokeratin AE1/AE3, they are not often necessary. Differential diagnoses include basal cell carcinoma, metastatic tumor, cutaneous lymphoma, and other adnexal cutaneous neoplasms. The treatment is always surgical with margins of safety since 6.7% of the cases show a malignant transformation. It is important to note that hidradenocarcinoma is clinically similar to hidradenoma.

Conflicts of Interest

The authors declared that there is no conflict of interest

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