Case Report

Clear cell hidradenoma

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Abstract Clear cell hidradenoma or nodulocystic hidradenoma or acrospiroma are histologically distinct relatively rare tumors of sweat gland duct origin, found mainly in adults with a female preponderance. We report a case of eccrine hidradenoma in a 31-year-old man who presented with an asymptomatic, solitary nodule on occipital region. A few reports are available in literature regarding presence of this tumor on occipital region of young man and present case is being reported because of its rarity in this region of scalp and in this sex.

Key Words: Acrospiroma, clear cell, eccrine, hidradenoma

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INTRODUCTION

Hidradenoma is a relatively rare tumor of sweat gland origin. Although traditionally regarded as displaying eccrine differentiation, it is now accepted that tumors can show either eccrine or apocrine differentiation.[1,2] This tumor found mainly in adults, and is excised more commonly in women than in men. Lesions in children are very rare.[3,4] The tumors are firm dermal nodules, 5–30 mm in size, and may be attached to the overlying epidermis, which can be either thickened or ulcerated. Growth is slow and there may be a history of serous discharge. The lesions are usually solitary and are most likely to be found on the scalp, face, anterior trunk and proximal limbs.[3] We report a case of eccrine hidradenoma in a 31-year-old man who presented with an asymptomatic, solitary nodule on occipital region. No reports are available in literature regarding presence of this tumor on occipital region of young man and present case is being reported because of its rarity in this region of scalp and in this sex..

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CASE REPORT

Clinical summary

A 31-year-old man presented with a solitary, asymptomatic 2 × 2.5 cm nodule on the occiput region of the scalp. About 2 years ago, the patient noticed a papule in this area, but due to being small and without symptoms, no action for diagnosis and treatment was taken. About 4 months ago, the lesion has started to grow quickly and gradually had become a 2 × 2.5 cm nodule [Figure 1].

The lesion was cone shaped with a small ulcer and little discharge in the apex. Lesion was asymptomatic but because of recent rapid growth and location of the tumor that touch pillow during sleep, has found a little pain and burning. The lesion was sampled, and after confirmation of diagnosis complete elliptical excision was performed and resent to pathology [Figures 2 and 3].

Pathological findings

Macroscopic examination specimen consisted of skin-covered mass measuring 2.5 × 2 × 1.5 cm^3. It was firm in consistency. The cut surface was grayish white and homogenous.

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Microscopic examination the histopathological examination of the specimen showed similar morphology. The dermis showed tumor lobules composed of cellular masses separated by eosinophilic, homogenous material [Figure 4].

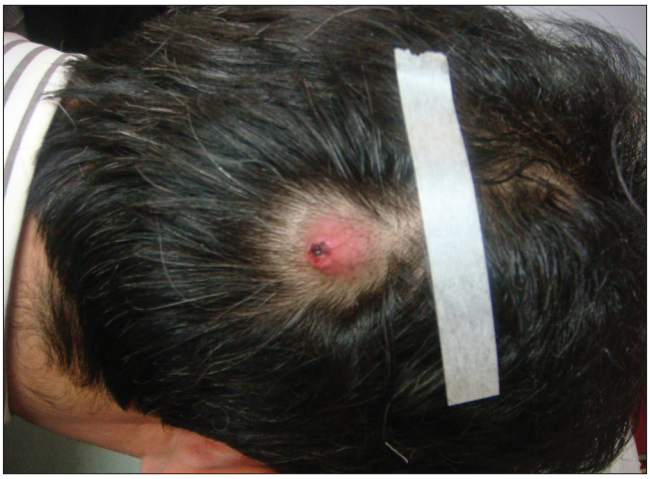


Figure 1: The lesion before treatment

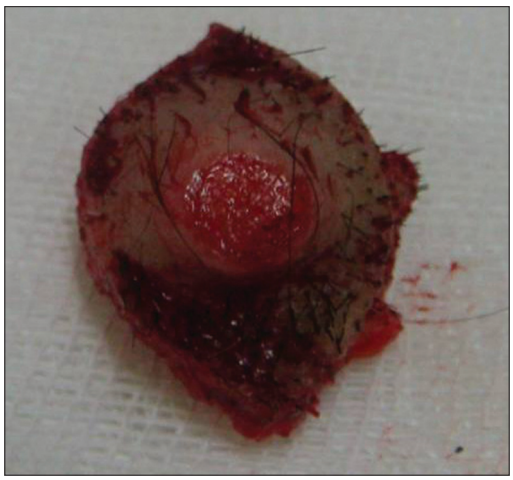


Figure 2: The lesion after removing

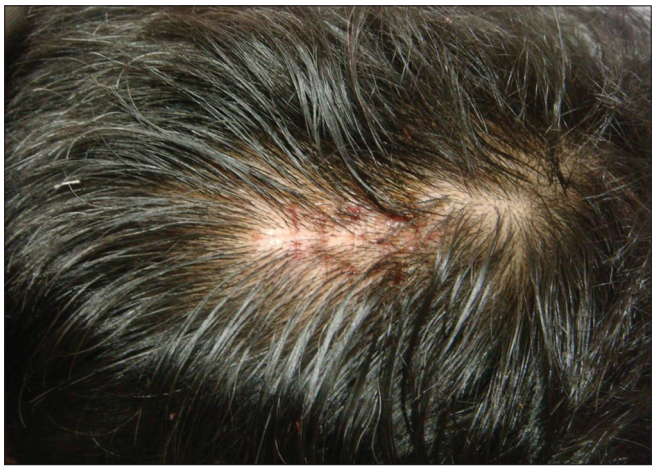


Figure 3: The scalp after lesion excised

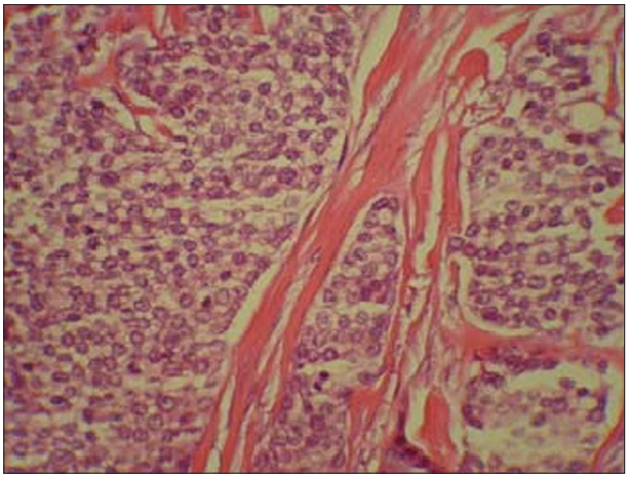
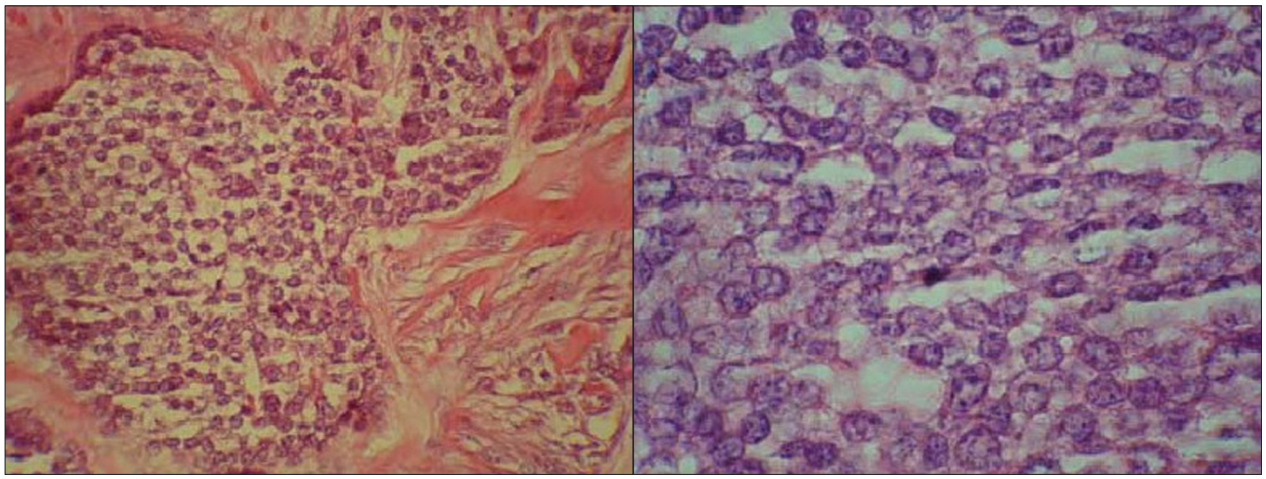


Figure 4: Histopathology of lesion that cellular masses separated by eosinophilic, homogenous material



Figures 5: Histopathology of lesion with round and clear cytoplasm cells

In solid portions of the tumor, two types of cells could be recognized. One cell type is polyhedral with a rounded nucleus and slightly basophilic cytoplasm. Another cell type was usually round and contains very clear cytoplasm, the cell nucleus appears small and dark [Figures 5].

No atypical mitotic figures were noticed. The diagnosis of clear cell hidradenoma or nodular hidradenoma was made.

DISCUSSION

Clear cell hidradenoma or eccrine acrospiroma of the skin was first described by Liu in 1949 as clear cell papillary carcinoma of the skin. Subsequently, it was reported under various designations.[5] Clear cell hidradenoma or nodulocystic hidradenoma or acrospiroma are histologically distinct relatively rare tumors of sweat gland duct origin. Although traditionally regarded as displaying eccrine differentiation, it is now accepted that tumors can show either eccrine or apocrine differentiation.[1,2] This tumor found mainly in adults, and is excised more commonly in women than in men. Lesions in children are very rare.[3,4]

It usually presents as slowly enlarging, single, asymptomatic, firm tumor, or nodule, 5–30 mm in size and may be attached to the overlying epidermis. Some tumors discharge serous material while others tend to ulcerate. Slight tenderness is an uncommon complaint. The lesion can occur on any anatomical site.[5] Histopathological appearance of clear cell hidradenoma is very typical, characterized by two types of cells- eosinophilic cells and clear cells alongwith duct like cystic spaces lined by low cuboidal cells.[6] Focal squamous differentiation may be seen,[7] which was not observed in the present case. Malignant transformation is very rare, and the diagnosis relies on identification of the pre-existing benign component.[8] When the tumor is attached to the epidermis, the diagnosis may be suspected on clinical grounds, especially if there is a history of discharge. Ulcerated lesions may resemble basal cell carcinoma. Dermal nodules are non diagnostic by clinical inspection. Surgical excision will cure benign lesions. Local recurrences are rare. Malignant eccrine hidradenoma may metastasize.[9,10]

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