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Case Report

Clear cell hidradenoma a rare tumour of face: A case report

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Abstract

A 42 year old female presented with a nodular swelling in the face of one year duraton. Histopathology of the locally excised tumour reveled clear cell hidradenoma.

Hidradenoma is a rare benign tumour of sweat gland duct origin. It is found in adults with a female preponderance.

The purpose of reporting this case is following: 1): Solid cystic hidradenoma of sweat gland has an incidence rate of 5.1 case /one million people annually, accounting it to be a rare case to be reported. 2): To emphasize the need of including this tumor in differential diagnosis of benign tumours of head and neck; 3): It is a benign adnexeal tumour with clear cells so cutaneous renal cell carcinoma deposits are to be considered in differential diagnosis; 4): Malignant hidradenocarcinoma has a similar presentation with more aggressive clinical course and high degrees of local nodal metastasis. This emphasizes the need of histopathology, radio imaging and in immunocytochemistry in these lesions.

Keywords: Benign tumour of face, Clear cell hydradenoma.

Introduction

Clear Cell hidradenoma (CCH) is an unique tumour of distal excretory ducts of sweat gland origin. These are benign, solitary, firm, well defined with margins of 0.5 cm to 3 cm in diameter , non encapsulated, slowly growing and usually affect the dermal layer of head, face, extrimities. Later, skin thickening, colour changes, serous discharge and tenderness appear in the lesion. Head and neck is the most common site affected (60%), face (32%) and others (8%).[3] They are usually seen 3rd to 6th decade of life with a female preponderance. They rarely show aggressive clinical behavior or malignant transformation. [5]At times CCH shows striking histologic similarity to other clear cell tumours, including renal cell carcinoma.[8] In this case report we describe a 42 year old female who presented with a swelling on left side of the face, the excision biopsy of which turned out to be a clear cell hidradenoma. Diagnosis is made on histological findings.

Case Summary

A 42 year old female presented in the OPD with complaints of a painless swelling on left side of the face since one year; gradually increasing in size. There is history of scanty serous discharge from the swelling off and on. For the past 3 months she was also experiencing slight pain, ulceration and blood stained serous discharge from the swelling.

There is no history of any similar swelling elsewhere in the body and no other significant coexisting illness.

On examination

It was a solitary, nodular, erythematous, well circumscribed, dome shaped tumour with an irregular surface measuring approximately 0.8mmx0.8x0.4 mm

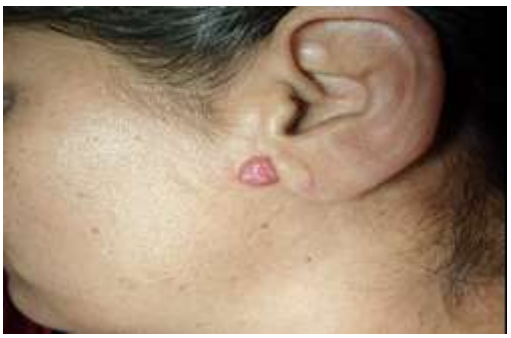

Fig. 1: Clear cell Hidradenoma

On palpation, it was firm and slightly tender. Regional lymphadenopathy was absent.

Under local anaesthesia, tumour was excised in toto with overlying skin by an elliptical incision with adequate skin margins. Primary closure of the wound was done and tissue was sent for histopathology.

H and E staining showed histologically unremarkable skin lining with an underlying tumour comprising of bland clear cells arranged in nodules along the appendageal structures with focal ductular differentiation. (Fig. 1) There is no evidence of cellular atypia, basement membrane material deposition, mitotic activity or necrosis (Fig. 2). Nodal or salivary gland parenchyma not seen.

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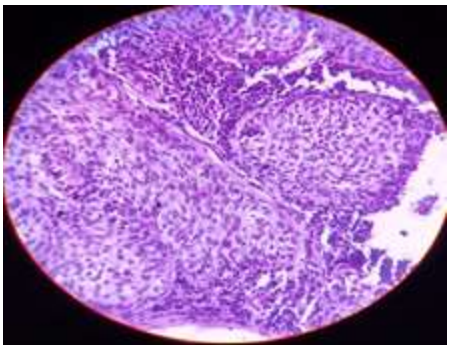

Fig 1: Bland clear cells arranged in nodules

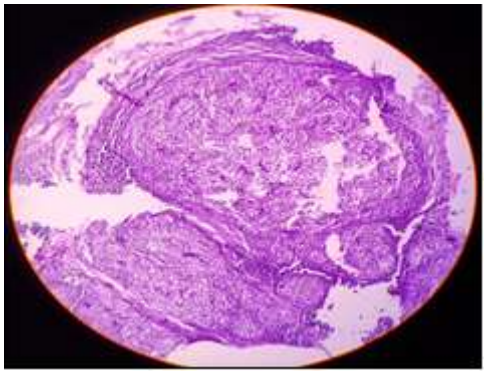

Fig 2: Cells with clear cytoplasm and small bland nuclei

Based on clinic pathological correlation, diagnosis of Clear Cell Hidradenoma was made.

Discussion

Clear cell hidradenoma (CCH) is a rare benign tumour of ducts of eccrine[1] and sometimes apocrine[2] sweat glands of the skin. Literature was reviewed for both clinical course of the tumour and histological features .This tumour was first described by Lieu in 1949.[2] Hidradenoma may have many histological patterns based on which they are named as CCH, nodulocystic hidradenoma or acrospiroma.[2] These tumours are solitary, slow growing, painless, nodular, well circumscribed, non encapsulated and attached to the overlying skin. Usual associated symptoms are serous discharge which may become blood stained as the skin changes occur. Although usually reported at cutaneous sites, it is also reported in unusual locations like in oral mucosa,[1] isolated intranodal sites,[9] extremities, breast and axilla

CCH is mostly seen in females in the age group of 31 to 40 years but have been reported in 18 month and 5 year old child[3] and young girls. Male to female ratio is 1:1.27.[4] There is usually no history of trauma associated with the swelling.

Recently these tumors have been shown to be associated with TORC1-MAML2 gene fusion.[5]

FNAC has no role in diagnosis of these tumours as most results are inconclusive.

Radiological findings are non specific.

Gold standard of diagnosis is the typical histopathological findings of the tumour.

Surgical excision of the tumour with adequate margins including the overlying skin followed by primary closure is the treatment of choice.

It is noteworthy that large or recurrent tumours should be removed with adequate skin margins and regular follow ups are mandatory as CCH has been associated with high rates of recurrence (10%) and have potentiential for malignant transformation.[6] Long standing tumours may show malignant transformation in 7% of cases.

Mohs micrographic surgery is advocated in large or recurrent cases as it ensures complete removal of tumour.[7]

Most important differential diagnosis of CCH is cutaneous metastatic clear cell deposits of renal cell carcinoma in face and scalp with an incidence of 2.8-6.3% of the cases of renal cell carcinoma.[9]

Malignant hidradenoma has a tendency to metastasize to the regional lymph nodes and viscera

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None.

Conflict of Interest

None.

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