

Nodular hidradenoma over the leg

C Prathyusha¹, S RamChander², D V S Pratap³

¹Postgraduate student, ²Professor & Head, Department of General Surgery, ³Professor & Head Department of Dermatology, Prathima Institute of Medical Sciences, Karimnagar, Telangana, India.

Address for correspondence: Dr. C Prathyusha, Post graduate student, Department of General Surgery, Prathima Institute of Medical Sciences, Karimnagar, Telangana, India.

Email:challa5188@gmail.com

ABSTRACT

Nodular hidradenoma is a rare benign tumour of eccrine sweat gland. It usually presents as a solitary, intradermal nodule 0.5 -2 cms in diameter in most instances. It may be red, brown or bluish and sometimes may show superficial ulceration. We are presenting a case report of 50 years old female who presented with painless swelling measuring 3×3 cms over right leg for 2 years. Excisional biopsy of swelling showed findings suggestive of eccrine hidradenoma. Preoperative diagnosis is often difficult and diagnosis of benign nodular hidradenoma can only be established after biopsy. Carcinoma of sweat gland often mimics benign tumour and a definitive diagnosis of benign nodular hidradenoma is made after biopsy.

Keywords: Hidradenoma, eccrine sweatgland, benign tumour

INTRODUCTION

Nodular Hidradenoma (a/k/a. solid-cystic or clear cell Hidradenoma or acrospiroma) is a benign adnexal tumor that arises from the distal excretory duct of eccrine sweat glands. It usually presents as slowly enlarging, solitary, freely movable nodule, solid or cystic, measuring on an average 0.5-2cm in diameter, but may reach 6 cm or more. The lesion is hypothesised to occur anywhere on the body e.g. axilla, face, arms, thighs, trunk, scalp and pubic region but the most common site is head. The tumour is most commonly seen involving the trunk with distal extremity involvement extremely rare. Most commonly it is seen in the age group of 20-50 years and is rare in children. It occurs twice as commonly in women as compared to men.

CASE REPORT

A 50 years old lady presented with swelling over the inner and lower aspect of right lower limb for two years. There was slow progression in the size of swelling and attained the present size, there was no pain associated with the swelling, no history of fever. No history of similar swellings over the other parts of the body. The swelling was of size 3×3 cms on the medial aspect of lower 1/3rd of right leg, spherical in shape, smooth surface with well defined margins. Skin over the swelling is adherent, swelling is soft, mobile over the underlying

structures [Figure 1]. Pagets test was negative and no inguinal lymph nodes palpable. HR-USG of the swelling suggestive of well defined isoechoic to hypoechoic lesion



Figure 1: Clinical photograph of the swelling.

Fine needle aspiration cytology (FNAC) of the swelling was done and reported as chronic non – specific inflammation .



Figure 2: Intraoperative photograph. and specimen sent for histopathological examination.



Figure 3: Wedge biopsy of the ulcerated swelling done

After adequate investigations, patient was taken up for surgery excisional biopsy done (Figure 2 & 3) and specimen sent for HPE.

Histopathology showed well defined aggregates of cells in dermis comprising of clear cells and polygonal with abundant glycogen, whorls of squamoid cells with eosinophilic cytoplasm and mucinous cells. Nodules interspersed with dermal ducts showing two layers of cells and glandular areas and reported as Nodular Hidradenoma. (Figure 4)

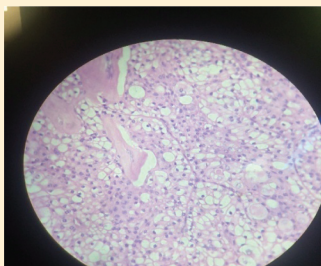


Figure 4: Section showing features of Nodular Hidradenoma.

DISCUSSION

Sweat gland neoplasms are extremely rare neoplasms. They can be classified into benign and malignant variety. The benign variety have been sub divided into subtypes such as nodular, apocrine, solid - cystic and clear cell based on their histo-pathological presentation. The malignant form or sweat gland carcinomas are those that possess an infiltrative and/or metastatic potential. They are generally classified into two groups. The first group comprises malignant tumours that closely mimic their benign counterparts while tumours in the second group do not have a benign counterpart¹.

Nodular hidradenomas are usually seen in third to fifth decade of life and are twice more common in females². Clinically the tumour usually presents as an asymptomatic, solitary, 0.5 to 6 cm sized, skin coloured intra-dermal nodule, slightly elevated above the surrounding skin^{3,4}. Occasionally brown, blue or red discoloration and surface erosions or ulceration may be observed. It is a slow growing tumour and rapid growth may represent trauma, haemorrhage or a malignant change.

Differentiation depends upon biopsy. Histopathology shows both solid and cystic components in varying proportions. The tumour has tubular lumina lined by cuboidal or columnar cells and variably sized cystic spaces. The solid portions contain two types of cells: polyhedral cells with basophilic cytoplasm and glycogen containing pale or clear cells with a clear cytoplasm and a round nucleus. The histology of malignant hidradenoma resembles that of its benign counterpart. The

criteria for malignancy include poor circumscription, presence of nuclear atypia and mitotic activity, predominantly solid cell islands, infiltrative growth pattern, areas of necrosis and angio-lymphatic permeation⁵.

Nodular hidradenoma is labelled as atypical when there is no evidence of invasive features but it has a high mitotic rate or nuclear atypia. The exact frequency of Nodular hidradenoma and their risk of transformation into malignant tumors is not known. However, mitotic activity and cellular pleomorphism may not be accurate predictors of clinical behaviour. Malignant hidradenocarcinoma are usually known to arise de novo and malignant transformation of benign nodular hidradenoma has rarely been reported.

Treatment of benign, atypical and malignant nodular hidradenoma is surgical excision with adequate margins to minimize the risk of recurrence followed by histologic confirmation of adequacy of excision. A carcinoma from sweat gland often mimics the benign hidradenoma and frequently will not have any obvious nuclear changes, hence biopsy is done to ensure tumour is benign. Excision of swelling is found curative.

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