



Poroid Hidradenoma: A Rare Tumor

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ABSTRACT

Study present a case report of 36 years old male presented with 4x4 cm asymptomatic,non-tender gradually increasing swelling over left side of the chest wall since the last 5 months. Histopathology revealed a well demarcated, solid cystic lesion confined to the dermis, with no apparent connections to the epidermis. There are some cystic spaces filled with amorphous material. The tumor appeared to be made up of two types of cells;small and dark staining poroid cells and large and paler cuticular cells; these findings were compatible with poroid hidradenoma, which is a benign dermal tumor.

Keywords: *Benign, dermal Tumour, Poroid Hidradenoma.*

INTRODUCTION

In 1990, Abenzoza and Ackerman described four variants of poroid neoplasm according to the location of the neoplastic cells: hidroacanthoma simplex, dermal duct tumor, eccrine poroma and poroid hidradenoma⁽¹⁾. Hidroacanthoma simplex is characterized by nests of clearly discrete, small, rounded cells within the normal epidermal cells⁽²⁾.

The pathology of the dermal duct tumor is similar to that of the hidroacanthoma simplex but the nests of the tumor cells making up the lesions are located in the dermis⁽³⁾. Eccrine poroma is a lesion with clear margin between adjacent, normal epidermal keratinocytes and a population of smaller cuboidal cells,usually with darker nuclei protruding down into the underlying dermis⁽⁴⁾.

Poroid hidradenoma is a tumor with solid and cystic components, in which neoplastic poroid cells are all located within the dermis without overlying connection to the epidermis⁽⁵⁾.

Poroid hidradenoma is a benign neoplasm with eccrine differentiation, it is usually a solitary asymptomatic neoplasm that rarely becomes malignant. The age of onset ranges between 25-75 years with equal preponderance of male and female patients. The most frequent site of involvement is head and neck region. The tumor is well circumscribed and fully intradermal. It appears erythematous becomes tender on some occasions. Poroid hidradenoma shows architectural features of hidradenoma and cytological features of poroid neoplasm. The tumor requires wide local excision to prevent recurrence. Since 1990 less than 20 cases have been reported in the literature.

CASE REPORT

A 36 years old male patient presented in outpatient department with a gradually increasing swelling over lateral aspect of lower chest wall since last 5 months.(Fig.1). physical examination revealed a 4x4 cm ,non-tender, soft to firm erythematous tumor with vascular appearance and well-defined margin.

RESULTS

The histological finding of excision biopsy of the tumor revealed that the neoplasm made up of basiloïd cuboidal cells with round to oval uniform

nuclei arranged in sheets and trabeculae with palisading of cells. Some areas shows hyalinization and thickening of basement membrane. Arrangement of cells at the periphery of the vessels and cystic changes with marked plasma cell infiltrate were also present. The histological picture thus highly suggestive of poroid hidradenoma.(fig.2).

At immunohistochemistry, the former were positive for cytokeratin AE1/AE3,CK7,CK7, PanCK,CEA (Fig.3). Latter reacted with cytokeratin 7, CK7 and PanCK, EMA. After 3 months follow-up after excision(Fig.4) there were no any complication and recurrence of the lesion noted.

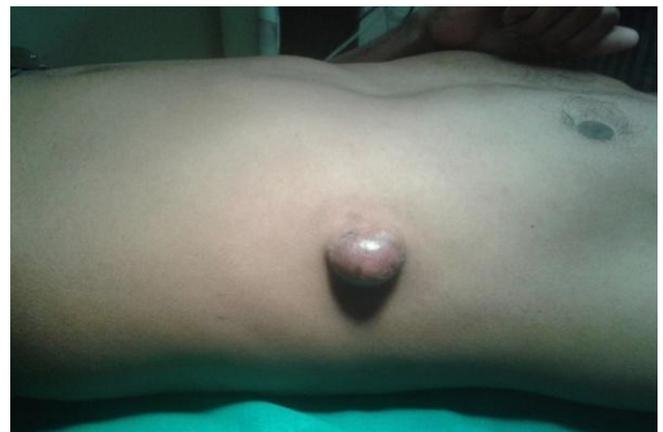


Fig.1 swelling over lateral aspect of lower chest wall

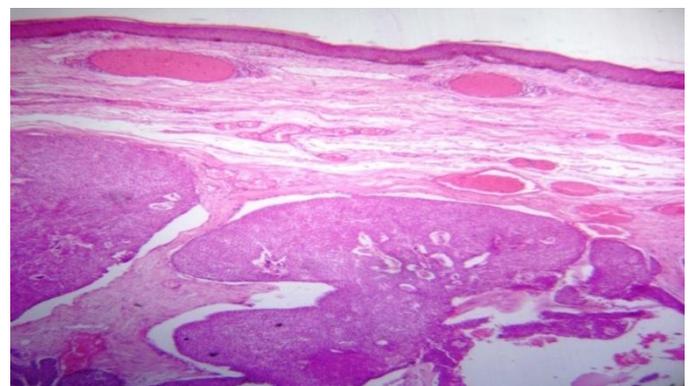


Fig.2 Histopathological Picture

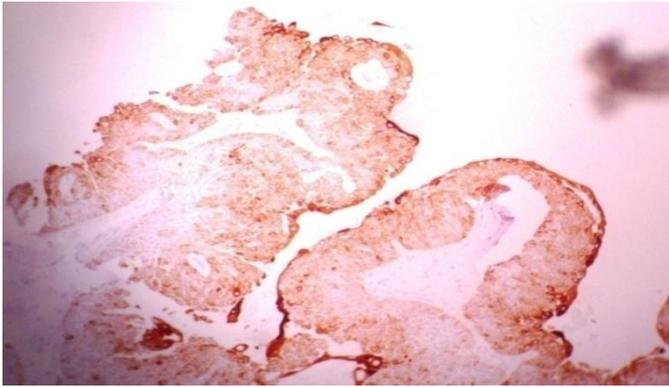


Fig.3 IHC:cuticular cells showing positivity for CK 7,CK 14,PanCK and CEA



Fig.4 After excision and follow up at three months

DISCUSSION

Poroid hidradenoma is an uncommon variant of the eccrine poroma which is a hybrid lesion with features of both hidradenoma and poroma. Typically poroid hidradenoma presents as a solitary, tender papule or nodule, well-circumscribed and fully intra-dermal with diameter ranging from 1 to 2 cm. It appears slightly reddish but the presence of cystic component may confer a bluish hue on the lesion caused by Tyndall phenomenon^(2,3). The most common site of the involvement are the head and neck regions with a predilection of centro-facial

region(about 80-85% of cases)less frequent sites involve axilla, trunk and extremities.

Poroid hidradenoma is a tumor with a solid and cystic components,in which the neoplastic poroid cells located within the dermis without connections to the epidermis⁽⁵⁾. They belong to the poroid neoplasm group that represent 10% of sudoriferous tumours. This neoplasm presents architectural features of hidradenoma with solid and cystic areas and cytological findings of poroid neoplasm such as poroid and cuticular cells. The diagnosis of poroid hidradenoma is based on histological examinations of tissue samples. To date only 16 cases of poroid hidradenoma have been reported in the literature⁽⁶⁾.

The main differential diagnosis of poroid hidradenoma are the other members of sweat glands neoplasm such as hidroacanthoma simplex, dermal duct tumor, eccrine poroma, apocrine hidradenomas. Some benign subcutaneous connective tissue neoplasms such as fibroma, fibrolipoma, dermatofibroma, hemangioma, pyogenic granuloma, epidermal inclusion cyst, basal cell epithelioma and malignant eccrine poroma may also be challenging and may cause confusion while diagnosing poroid hidradenoma. Poroid hidradenoma is treated by total excision of the lesion to prevent its recurrence. The prognosis of poroid hidradenoma is very good, and recurrence has been reported in few cases.

CONCLUSIONS

Poroid hidradenoma is the newest addition to the group of poromas. It is benign tumor and rarely becomes malignant in less than 1% of the cases. The above case is reported because of its rarity and occasional literature documentations.

REFERENCES

1. Abezona P, Ackerman B. Neoplasm with eccrine differentiation, Lea & Febiger, Philadelphia, 1990; Vol 1:113.
2. Penicario C, Muller SA, Zelickson BD, Snow JL. Hydroacanthoma simplex. J Cutan Pathol 1994; 21:274-9.
3. Aloisi FG, Pippione M. Dermal Duct Tumor. Appl Pathol 1996; 4: 175-78.
4. Pennys NS, Ackerman AB, Indgin SN, Mandy SH. Eccrine poroma. Br J Dermatol 1970; 82:613-15.
5. Raquena L, Sanchez M. Poroid Hidradenoma; a light microscopic and immunohistochemical study. Cutis 1992; 50:43-46.
6. Weedon D. Eccrine tumor; a selective review. J Cutan Pathol 1984; 11:421-36.