



AN INTERESTING CASE OF SWELLING IN FOREHEAD -CASE REPORT.

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ABSTRACT Nodular hidradenoma is an uncommon benign adnexal neoplasm of either eccrine or apocrine origin that is commoner in adults than in children. Arises from sweat gland distal excretory duct, usually solitary, on the scalp, face and axillae. Here we present a rare and interesting case of 54-year-old male presenting with a scalp swelling in temporal region.

KEYWORDS

Nodular hidradenoma; male; skin adnexal neoplasm.

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INTRODUCTION:

Nodular hidradenoma is an uncommon benign adnexal neoplasm of either eccrine or apocrine origin¹⁻⁴ that is commoner in adults than in children. Nodular hidradenoma was first described by Liu in 1949 as clear cell papillary carcinoma of the skin, and has been termed clear cell hidradenoma, eccrine acrospiroma and solid-cystic hidradenoma. Nodular hidradenoma has a female predominance (1.7:1) with a mean age of 37.2. Hidradenomas may be of eccrine or apocrine origin. Solitary, nodule often partly solid, partly cystic. Arises from sweat gland distal excretory duct.

Clinically, it is usually a solitary, slow growing, well circumscribed, freely mobile, firm, non-tender, dermal lesion varying in diameter from 0.5 cm to 12 cm. Nodular hidradenomas are most commonly seen on the scalp, neck, trunk and extremities. The diagnosis is usually based on histopathology and the lesion is rarely subjected to fine needle aspiration cytology (FNAC).

Nodular hidradenoma may be asymptomatic or may present with pain, or bleeding, and rarely can show malignant transformation. When tumors show malignant characteristics, they are known as hidradenocarcinoma. Surgical excision is usually curative and local recurrences are rare, although malignant tumors may metastasize.

CASE REPORT

Patient is a 54-year-old male came with complaints of swelling in scalp for past one year. Initially, it was peanut sized swelling which gradually progressed to attain almond sized swelling within last 3 months. On examination: - A 3x2 cms swelling fluctuant and cystic in consistency was present in right temporal region. Swelling was excised and sent for histopathological examination. On gross examination a 3x2x1 cm soft tissue with overlying skin was received. Cut surface showed grey white solid areas with cystic spaces.

MICROSCOPIC EXAMINATION: Histology revealed a skin overlying well-circumscribed, encapsulated solid-cystic lobulated intradermal tumor (Figure: 1). The solid area showed clear to polygonal cells with nests and lobules of cells with prominent squamous cell differentiation. These nodules of cells are separated by fibrocollagenous tissue (Figure:2). Squamous cell differentiation with squamoid morules are also seen (Figure:3).

These squamous cells showed large eosinophilic cytoplasm and vesicular nuclei with prominent nucleoli (Figure:4). In few areas, clear cells showed abundant clear cytoplasm with a small, round to oval nucleus (Figure:5). Clear cells contain glycogen and periodic acid-Schiff-positive, diastase-resistant material, but no lipid

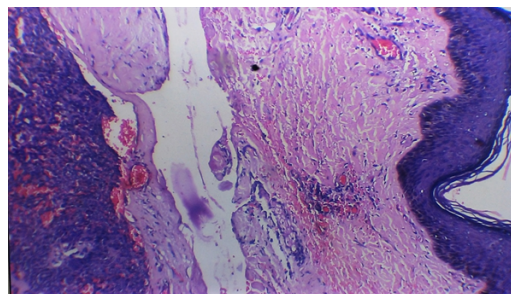


FIGURE 1: SKIN OVERLYING ADNEXAL TUMOUR..

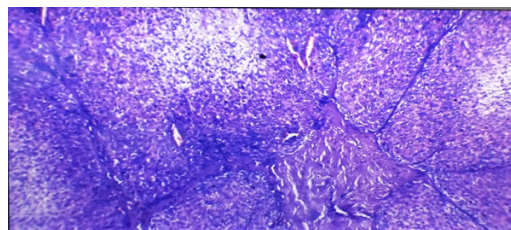


FIGURE 2: MULTIPLE NODULAR MASSES SEPERATED BY FIBROCOLLAGENOUS TISSUE.

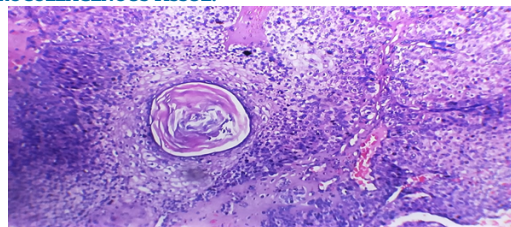


FIGURE 3: SQUAMOID MORULES AND KERATIN PEARLS ARE SEEN IN CENTRE.

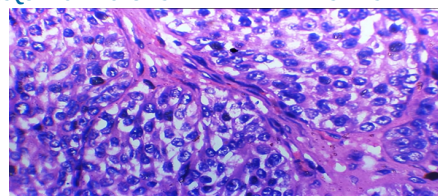


FIGURE 4: HYALINIZED FIBROCOLLAGENOS TISSUE SURROUNDED BY POROMA CELLS, WHICH SHOW ROUND TO OVAL NUCLEUS, VESICULAR NUCLEAR CHROMATIN, OCCASIONAL SMALL NUCLEOLI AND FINELY GRANULAR EOSINOPHILIC CYTOPLASM.

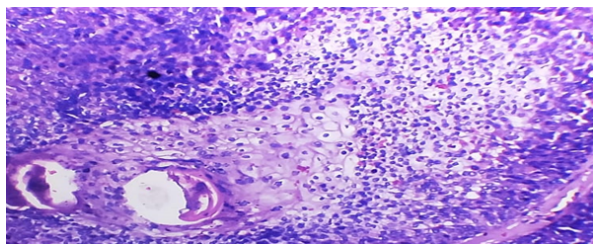


FIGURE 5: SOME AREAS SHOW CLEAR CELLS WITH ABUNDANT CLEAR CYTOPLASM AND SMALL CENTRALLY PLACED NUCLEUS. THIS PICTURE ALSO SHOWS KERATIN PEARLS.

DISCUSSION

Nodular hidradenoma is also known as eccrine acrospiroma, clear cell hidradenoma and solid-cystic hidradenoma [6]. Nodular hidradenoma are conventionally regarded as eccrine sweat gland neoplasm but apocrine differentiation can also occur. Enzyme histochemical and electron microscopical features show eccrine differentiation. The common sites of nodular hidradenoma are scalp, but can occur anywhere like axilla, face, arms, and thighs. (7) However unusual sites like oral cavity, (8) umbilical region presenting as umbilical polyp (9) has been reported in the literature. Nodular Hidradenomas of breast have also been reported. Clinically breast hidradenomas occur in nipple, subareolar region and in mammary ducts. (10) Microscopically these tumors are sharply demarcated from the epidermis, presents as intradermal lesion composed of epithelial lobules. Within the lobulated mass, tubular lumina of varying sizes and cystic spaces filled with eosinophilic material are seen. Solid areas shows presence of two types of cells, one is polyhedral with basophilic cytoplasm and other is round cells with round nucleus & clear cytoplasm due to presence of glycogen in it. In most cases of this neoplasm clear or polygonal cells are predominant whereas other types of neoplastic cells are less abundant. Our case showed a predominant squamous differentiation with squamoid morules.

CONCLUSION

We hereby report the above case, diagnosed as nodular hidradenoma with squamous cell differentiation.

As the lesion is limited, surgical resection is usually used for the treatment of this disease. But if the surgery is incomplete, the tumor may recur. Extensive surgical excision is generally recommended, and the long-term follow-up is necessary.

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