



Nodular Hidradenoma: A Case Report

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Abstract

A 14-year-old girl presented with a multiple and recurrent swellings on her right axilla. Based on histological features of the excised tumor, a diagnosis of nodular hidradenoma was made. Very few cases of hidradenoma have been documented in pediatric age group. This case demonstrates that when a child develops a skin nodule, nodular hidradenoma can be a diagnostic option.

Introduction

Nodular hidradenoma is a benign skin tumor with sweat gland origin. It presents clinically as a firm, solitary intradermal nodule^{1,2}, which grows slowly, over a long period of time. It mostly occurs in adults with the peak in fifth to sixth decade of life, but a few cases of nodular hidradenoma in children have been reported. The management is complete excision of mass with wide margin is done to reduce the risk of its recurrence and malignant transformation. Herein I report a young girl of 14 years old, who developed nodular hidradenoma. Hence, this case demonstrates that nodular hidradenoma is a rare differential diagnosis of skin tumors, even in the pediatric/adolescent age group.

Case Report

A 14 year old female presented to paediatric surgery OPD with history of recurrent and multiple swellings on right axilla and breast since 6 years. The swellings were insidious and slowly progressive in nature. She previously had undergone surgical removal of masses about 2.5 and 6 years back. The mass was successfully

removed during both surgeries but the mass reappeared after few months in both surgeries.

On examination there were multiple erythematous dome-shaped, well-circumscribed lesions, the largest size measuring approximately 4.3 cm × 4 cm. There was no preceding history of trauma involving the affected area. There was no ulceration or fluid leak from the lesion. There was no family history of similar complaints. On histopathological examination, it was a circumscribed tumour in dermis. It was composed of epithelial lobules separated by fibrous tissue. The lobule contains tubular lumina lined by cuboidal to polyhedral cells. Many cells showed cytoplasmic clearing and distinct cell membranes bland nuclei. Area of cystic change and hyaline material noted. However no necrosis or mitosis was seen. There was no connection with overlying epidermis. The subcutis show normal eccrine glands with apocrine change and lymphoid aggregates at places. Based on clinicopathological examination, a diagnosis of nodular hidradenoma was made.

Discussion

Nodular hidradenoma is also known as, eccrine sweat gland adenoma, clear cell acrospiroma, solid-cystic hidradenoma, eccrineacrospiroma, and clear cell myoepithelioma.⁵ They are mainly seen on the scalp, trunk and extremities but also reported to be seen in face, palms, axilla and shoulder^{3,4}. It usually presents as a slow-growing, red, blue, or brown-colored solitary, 5–30 mm in size, freely mobile and firm nodule, with an occasional cystic appearance, and women more commonly affected than men. They usually grow very slowly in size, and when they reach to large sizes, they are also referred as Giant hidradenoma. Our case was a 14 year old girl with slow growing multiple lesions of right breast and axilla, with largest lesion measuring about 4.3cm(AP)*4cm(T). On pathological examination, hidradenomas are circumscribed, noncapsulated, multilobular masses that lie in the dermis, with no connection to the overlying epidermis. The mass consists of both solid and cystic areas in varying proportions. They are composed of multiple lobulated masses of epithelial cells and tubular lumina of variable size and number^{6,7}. The solid portion is characterized by two types of cells. One cell type is polyhedral with a rounded nucleus and slightly basophilic cytoplasm and another cell type is round and contains clear cytoplasm, which contains glycogen. The differential diagnosis includes cystic hygroma, synovial cell sarcoma, fibrosarcoma, osteochondroma and neuroblastoma metastasis in childhood. Although malignant hidradenomas usually occurs de novo but rare cases of malignant transformation of benign lesion with metastasis has also been reported in literature^{8,9}. Immunohistochemical staining with antibodies against CK-CAM 5.2, BER-EP4, p63, epithelial membrane antigen, S-100 protein, smooth muscle actin, and vimentin help demonstrate tumour cells in the mass. Malignant lesions are characterized by increased mitotic activity, angiolymphatic invasion, local extension into deeper tissues, and a dispersed pattern of growth. Surgical removal of the mass with wide

margins and long term follow up after the removal is accepted as a standard treatment for nodular hidradenoma because of high rate of recurrence and possible malignant transformation of the lesion.

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