

PIGMENTED NODULAR HIDRADENOMA: A RARE CASE REPORT

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ABSTRACT

Nodular Hidradenoma has an eccrine differentiation in which pigmentation has been reported and can be mistaken for other pigmented lesions. Hereby we report a case of pigmented nodular hidradenoma in a 55 year old male who presented with a nodular swelling on upper eyelid. It was excised and histopathology revealed multilobated tumor with sheets of epithelial cells and tubular lumina lined by cuboidal cells with pigment granules. Very few cases of pigmented nodular hidradenoma have been reported till date in literature, ours is one of them.

KEYWORDS : Pigmented nodular hidradenoma, eccrine, tubular lumina

INTRODUCTION: Pigmented lesions of skin are common however correct histopathological diagnosis and differentiation between benign and malignant neoplasm is very essential. Therefore, pigmented nodular hidradenoma which is a benign tumor needs to be differentiated from other pigmented lesions of skin.

CASE REPORT: A 55 year old male presented with a painless nodule on the right upper eyelid since 2 years. Nodule measured 0.7x 0.4x0.4 cm in size, non fluctuating and was reddish in colour. His general physical examination was within normal limits. The nodule was subsequently excised and was sent for histopathological examination.

On histopathology, section examined showed thinned out epidermis with dermis showing a well circumscribed multilobated tumor with sheets of epithelial cells surrounded by fibrocollagenous tissue. Many tubular lumina lined by cuboidal tumor cells containing eosinophilic material and pigment granules were also noted. The solid pattern of tumor showed polygonal to round cells with eosinophilic cytoplasm with coarse nuclear chromatin and prominent nucleoli. Numerous pigment containing dendritic melanocytes were seen in the stroma. (Figure1-2). Based on these histological features, a diagnosis of pigmented nodular hidradenoma was given.

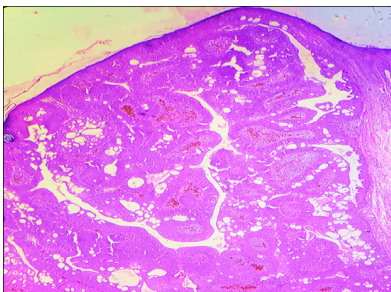


Fig.1-H&E 100X; Dermis showing multilobated tumor with many tubular lumina.

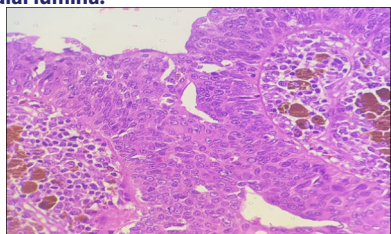


Fig2- H&E, 400X; Tubular lumina are lined by cuboidal to round cells with eosinophilic cytoplasm and pigment granules.

Numerous pigment containing melanocytes also noted.

DISCUSSION: Nodular hidradenoma is also known as eccrine acrospiroma or eccrine sweat gland adenoma which is a common cutaneous tumor, usually presents as solitary intradermal nodule measuring in size between 0.5 to 2cm. [1] However, sweat glands lack melanocytes and melanin pigment, so the presence of melanin in eccrine gland tumor is very rare. Although, melanocytes are present in sweat duct anlagen of an embryo (around 14 weeks old) but the mechanism by which, this melanin is retained in the sweat gland is yet to be determined. It is also said that it could be due to secretion of melanin growth factor from tumor cells. [2]

Other pigmented lesions of adnexa should be kept in mind while making the diagnosis like pigmented basal cell carcinoma, epithelioma, seborrheic keratosis, squamous cell carcinoma and even pigmented nevus and melanoma. [3] Basal cell carcinoma shows palisading basaloid cells with clefting or retraction artefact while squamous cell carcinoma cells have keratinized cells and keratin pearls. Nevus and melanoma have typical nevus cells which can be in different stages of maturation. [1]

CONCLUSION: This case is a rare example of pigmented neoplasm which should be kept in mind while making a diagnosis of some pigmented tumor of skin.

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