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Papillary Eccrine Adenoma: A Case Report

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Abstract: Papillary Eccrine Adenoma (PEA) is a rare benign cutaneous sweat gland tumor which usually presents as an isolated, well circumscribed dermal nodule for a prolonged duration of time. It has a slow growing nature with greater incidence in women. It can resemble other cutaneous neoplasms, hence, it may present with diagnostic challenges. We report a case of Papillary Eccrine Adenoma in a 75yr old woman diagnosed by light microscopy. So far a total of 48 cases are reported in English literature.

Keywords: benign cutaneous tumor, sweat gland origin, diagnostic challenges, light microscopy.

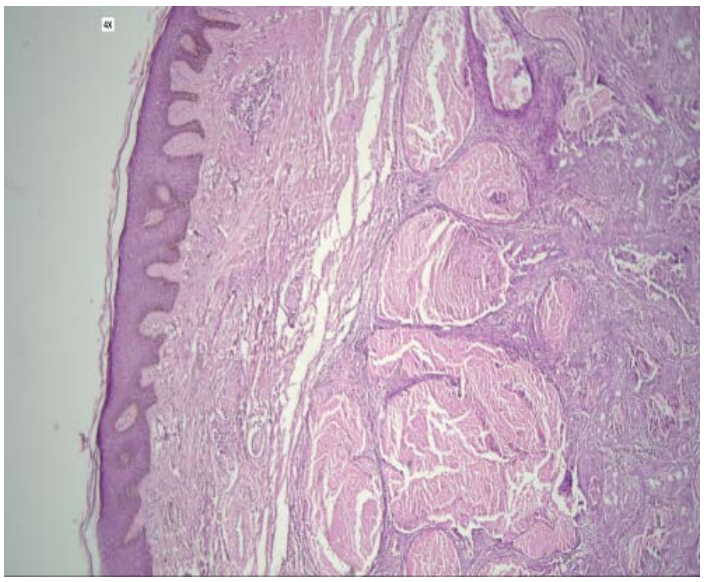
Introduction

Papillary Eccrine Adenoma (PEA) is a rare benign appendage tumor of eccrine differentiation. It is characterized by dilated duct like spaces lined by 2 layer of epithelial cells and lack decapitation secretion. It commonly occurs in distal extremities as a small solitary nodule. We report a case of papillary eccrine adenoma due to its rarity and architectural similarity to tubular apocrine adenoma. Majority of PEA reported in literature have a benign clinical course. The recommended treatment is conservative surgical excision with clear margin.

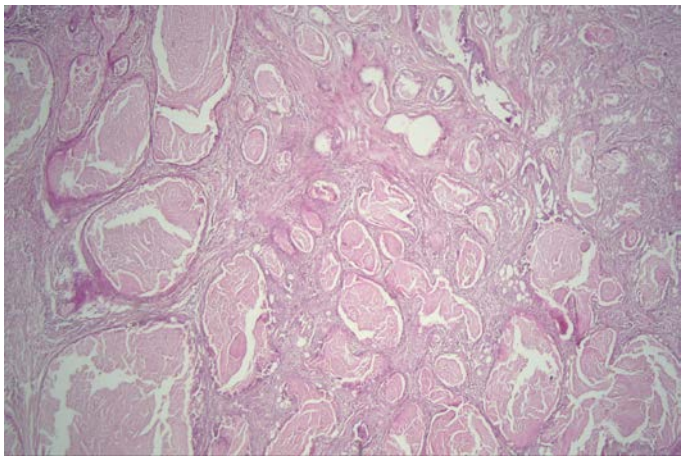
Case Report

75 year old woman from Kollam district presented with a solitary painless nodule on right wrist of 1 yr duration. No change in mass was noted over the period. Clinically it was well defined, mobile and firm nodule measuring 1.5 X 1.5 cms. Excision biopsy was done.

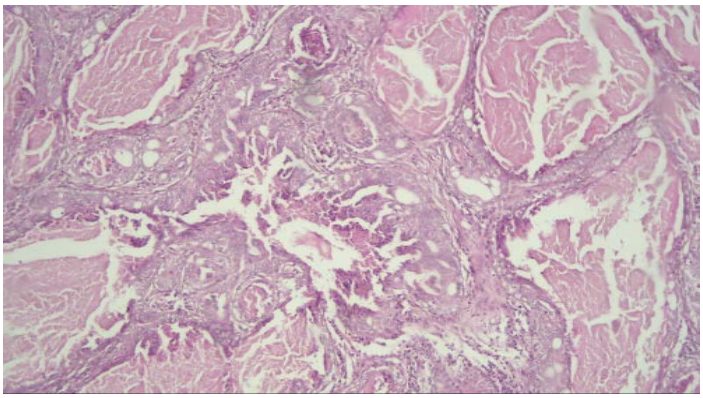
Light microscopy showed a well-defined dermal nodule composed of duct like spaces of varying sizes filled with eosinophilic material. Most of the spaces were lined by 2 layers of cells without atypia or pleomorphism. Some of them showed papillary projection into the lumen. Focal squamous differentiation was seen. There was no decapitation secretion. No necrosis or mitosis seen. The surrounding stroma showed plasma cell infiltration. Excision was complete with clear margins. No recurrence was noted over past 6 months of follow up.



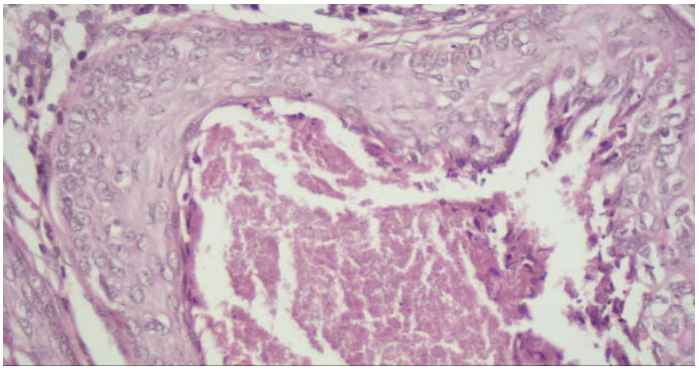
H&E(4X): Dermal neoplasm which is discount- Inous with overlying epithelium



H&E(4X): neoplasm arranged as duct like spaces filled with eosinophilic secretions



H&E(10X): Some duct like spaces show Intracystic papillations



H&E(40X): Focal areas showing squamous differentiation

Discussion

PEA was first described in 1977 by Rulon and Helwig[1]. It occurs over a wide age distribution (9-78yrs) with a mean age of 46 years. Majority of them occur in women and in blacks. The size ranges from 5mm– 40 mm. The clinical presentation varies over a period of 2 months to 20 yrs[2]. PEA shows architectural similarity to tubular apocrine adenoma and was once considered identical. But, PEA lack decapitation secretion and is negative for acid phosphatase which is an apocrine enzyme[3]. Aggressive digital papillary adenoma, another differential diagnosis, has a nodular pattern with mild to moderate pleomorphism. Even though it may resemble aggressive digital papillary adenocarcinoma, the latter is more cellular and cystic spaces are lined by atypical epithelial cells with frequent mitosis[3]. It should be distinguished from basal cell carcinoma with eccrine differentiation or now called syringoid eccrine carcinoma by the absence of infiltrative growth pattern and presence of intracystic papillations[4]. Even though PEA show positive staining for S100, CEA and EMA by IHC (all of which indicated eccrine differentiation) it can be diagnosed by light microscopy alone also[3]. IHC for alpha SMA, keratin 8 and keratin 14 are more reliable in suggesting eccrine differentiation[5]. Recurrences are reported in cases with incomplete excision. Hence follow-up is essential. Current treatment of choice is complete surgical excision with confirmation of clear margins. Tumors located in sites that require careful excision to preserve function of nearby vital structures may have positive margins. No malignant transformation or metastasis from a primary lesion has been reported in literature till date[2].

Summary

It is a slow growing benign intradermal sweat gland duct tumor. Despite its typical histological features it can resemble other cutaneous neoplasms. Possibility of recurrence is not there if excision is complete. So far no malignant transformation or metastases have been reported in literature.

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