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Proliferating Trichilemmal Tumor (Pilar Tumour): A Case Report and Review of Literature

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Abstract

Proliferating Trichilemmal Tumor (PTT) is a rare Neoplasm arising from theist thymus region of outer hair root sheath of the hair follicle. Historically characteristic is presence of trichilemmal keratinization, it is mostly benign in nature but rarely has potential form malignant transformation, usually present as a solitary Nodule on scalp of elderly women. Predilection more in women than men. Commonly age group between 3rd to 6th decades. Pleomorphic presentation may occur. Ghost Apocrines pindle cell can be sebaceous in nature. These grow well circumscribed in dermal layers. Subcutaneous Neoplasm with squamous cytological feature with progressive enlargement over several months to year. They form lobulated exophytic mass which may ulcerates thus mimicking of sebaceous cysts or squamous cell carcinoma.

Keywords: Proliferating trichilemmal tumor; Proliferating pilar tumor; Proliferating trichilemmal cyst; Trichilemmal keratinization

Abbreviations: PTT: Proliferating Trichilemmal Tumor; CT: Computed Tomography; PPT: Proliferating Pilar Tumor

Introduction

Proliferating Trichilemmal Tumor is an uncommon neoplasm derived from is thymus region of outer hair root sheath of follicle and may be locally aggressive [1]. Other named this disease as: pilar tumor of scalp, Proliferating trichilemmal cyst, Proliferating pilar tumor, hydatidiform keratinous cyst, trichochlamydo carcinoma. They may be inherited in auto somal dominant pattern linked with chromo some Number. Proliferating Trichilemmal Tumor was first introduced by Wilson and Jonesin1966 as proliferating epidermoid cyst. In1995 Proliferating Trichilemmal tumor was distinguished from pro life rating epidermoid cyst. Most common site is scalp. Other sites are face, neck, trunk, groin, buttocks, (gluteal region) [2]. Asymptomatic nodule of ten present for month to

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year. Yielding lobulated and exophytic mass occasionally might ulcerate characterized by frequent local reoccurrence in rare instance malignant transformation found is usually confused with squamous cell carcinoma due to its similar clinical feature.

Case Illustration

A 35 year old female is otherwise healthy, presented with 1 year history of swelling on scalp in occipital region, which was progressively increasing in size. Swelling was mildly painful in nature. There was no such history in family. There was no history of suggestive of trauma and discharge. Swelling was no dular measuring approximately 4x 4cm on her scalp. No history of rapid increase in size, stromal invasion, palpable lymph node in neck. CT Head was showing mass in subcutaneous region. Patient underwent surgery and excisional biopsy was done. The histopathological examination of specimen revealed that mass excised from occipital region was microscopically compatible with trichilemmal cyst. Immuno histo chemistry analysis revealed membrane positivity for CD34 in more than 40% of tumor cell and focal calretinin reactivity. Ki67 immuno staining indicated a relatively low immuno reactivity showing staining of less than 51% of nuclei which was focal and present more toward periphery of lobule. P53 immuno staining was negative on the basis of above clinic pathology feature diagnosis was made as benign proliferative trichilemmal tumor. No relapse or metastasis was detected during 24 months follow up of patient.

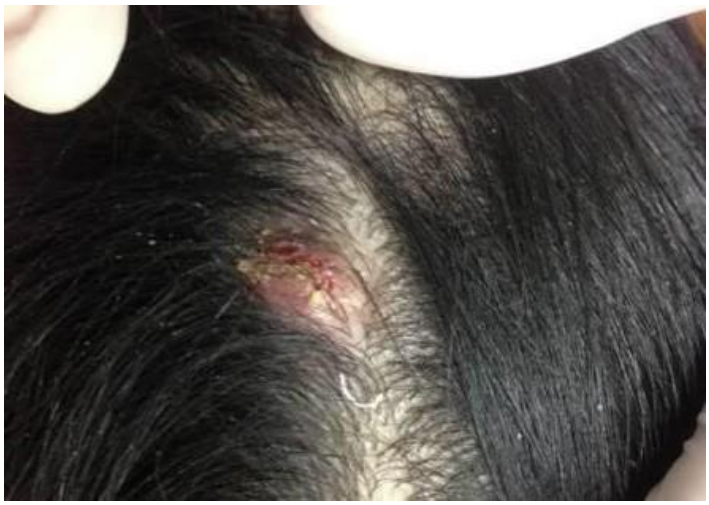

Figure 1: Actual photograph taken in outpatient department of Neurosurgery.

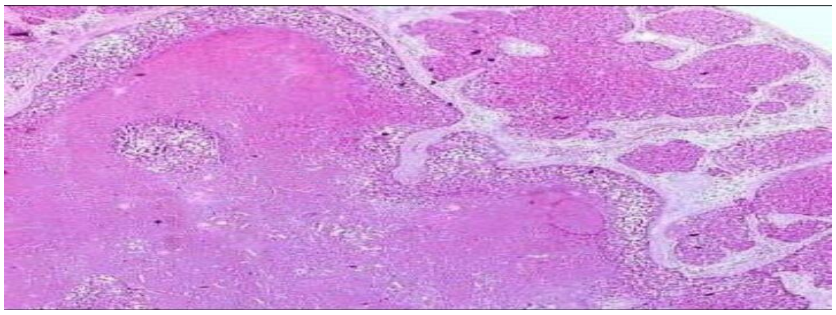

Figure 2: Histopathology photograph (showing-well circum scribed lesions with islands of squamous epithelium displaying trichilemmal Keratinization. Small cystical area may be present).

Results

Patient underwent excisions welling over scalp. There was no evidence of reoccurrence of swelling and metastasis was detected during 12 months of follow up.

Discussion

Proliferating trichilemmal tumor classically occurs as slow growing nodule on scalp of elderly women. Lesion usually is single painless nodule [3]. Trichilemmal cysts possess trichilemmal

keratinization as a histological marker. On the basis of histopathological examination may have following feature including trichilemmal Keratinization [4].

Minimal focal atypical rare mitosis and no invasion into the surrounding stroma or lymph vascular or per neural invasion, the proliferating marker Ki67 and Ki53 showed low Ki67 staining, negative Ki53 staining. Positive CD34 along with clarets in immune positivity favored out root sheath origin of this pilar tumor Squamish cell carcinoma [5]. Most of cases of proliferating trichilemmal tumor has benign proliferating research with free surgical margin is recommended as treatment of choice.

Conclusion

Proliferating trichilemmal tumor is a rare neoplasm; it is more often benign and very rarely malignant in nature but proliferating trichilemmal tumor has potential for malignant transformation. It is important to excuse any mass on the scalp that has clinical characteristic of proliferating trichilemmal tumor.

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