

Trichoblastoma A Rare Skin Lesion in the Head and Neck Area: A Case Report and A Literature Review



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Abstract

Trichoblastoma is a rare skin adnexal neoplasm, that has predominance in the head and neck area. Few cases were reported in the English literature, in which it was confused with basal cell carcinoma. In our case, we present a 64 year old woman with a long standing history of right auricular mass. Excisional biopsy and closure with a full thickness skin graft was done and the histopathologic diagnosis was Trichoblastoma. Here in, we present a rare case of auricular trichoblastoma and we discuss the different differential diagnoses in such clinicopathologic presentation.

Keywords: Trichoblastoma; Neoplasm; Head and neck area; Basal cell carcinoma; Skin lesion

Introduction

Trichoblastoma is a rare benign skin adnexal neoplasm, originating from follicular germinative cells of the hair bulb and associated mesenchyme. Moreover, Trichoblastomas can occur at any age, except young children, though more commonly present in the fifth to seventh decade of life and is predominantly found in the head and neck area. Clinically, it appears as an asymptomatic, well defined, skin colored to brown nodule. Clinically, and histopathologically, it can resemble basal cell carcinoma, hence it's important to differentiate the two, as the management differs greatly. Trichoblastoma is rarely reported in the English literature and its exact incidence and prevalence are not known. In our case report, our aim is to differentiate between the two and to add to the literature how to approach and manage similar cases.

Case Report

A 64-year-old lady presented us with a long-standing history of right auricular mass; and she was asymptomatic, otherwise. Her past medical and surgical histories were insignificant, and she denied any family history of skin cancer. On close inspection, it was a well-defined, round mass, that was skin colored, and was located on the concha of the right ear. The patient was admitted to Zain hospital for elective excisional biopsy. Local anesthesia was administered and an excisional biopsy was done. The defect

was closed with a full thickness graft, which was harvested from the post auricular area. After the surgery, the patient had no complaints and the graft healed adequately.

The Hematoxylin and Eosin (H&E) stained sections of the formalin fixed paraffin embedded specimen revealed a well circumscribed "basaloid/blue" cellular neoplasm in the dermis (Figure 1). The cells are arranged in variably sized nests and lobules with prominent basal palisading and condensation of mesenchymal stroma cells around the lobules, without the common cleft artifact seen in basal cell carcinomas (Figure 1 & 2). Whorling of the tumor cells with subtle clearing and a 'Zellballen' pattern was prominent in the tumor (Figure 3), suggesting a Trichogerminoma variant of the Trichoblastoma, a feature that is not typically seen in basal cell carcinomas. Also, to rule out the possibility of a glandular adnexal tumor, such as eccrine spiradenoma or hidradenoma, myoepithelial immunohistochemical stains were performed and only p63 was positive in a diffuse, non-biphasic, pattern (Figure 4).

Discussion

Trichoblastoma is a rare skin neoplasm and the clinical diagnosis can be misleading. In the English literature, similar cases were reported in which the skin lesion was identified as

basal cell carcinoma, which would change the management plan tremendously [1]. Trichoblastoma is rarely reported and its exact incidence and prevalence are not known. It is more common in adults, yet it can occur at any age with no gender or race

predominance [2]. In addition, it is mostly found in the head and neck area. Comparably, basal cell carcinoma is more common in adults with higher rate of incidence in males than in females [1].

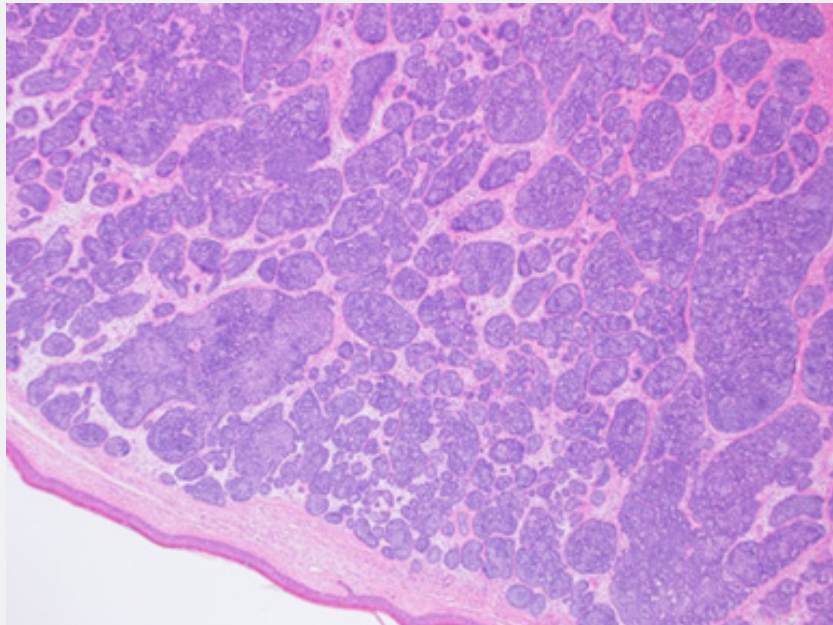


Figure 1: Low magnification photomicrograph showing the blue/basaloid tumor cells arranged in lobules and nests. (H&E: 40x).

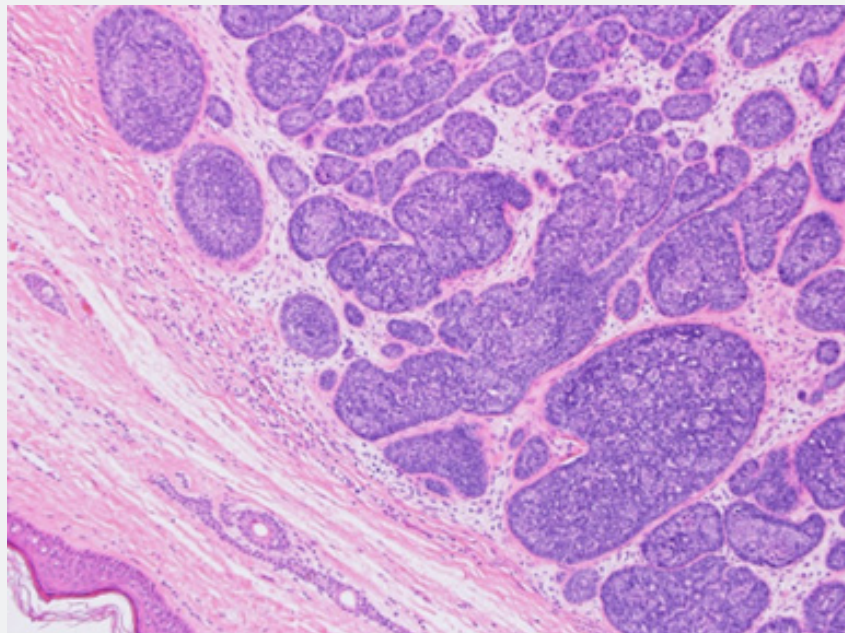


Figure 2: Low magnification photomicrograph showing the mesenchyma stromal cells in close proximity to the basaloid tumor nests. (H&E: 100x).

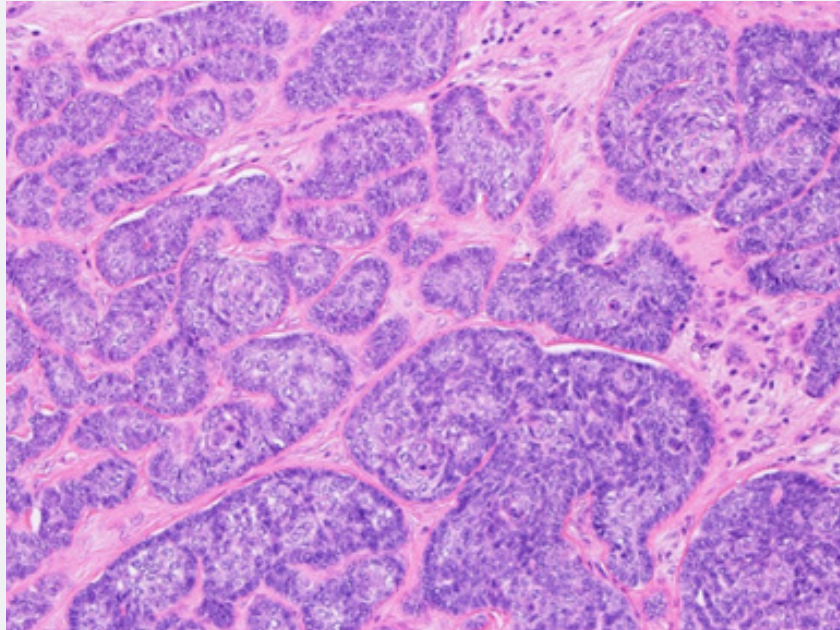


Figure 3: Higher magnification photomicrograph showing the subtle clearing of the cells with whirling and prominent basal palisading. (H&E: 200x).

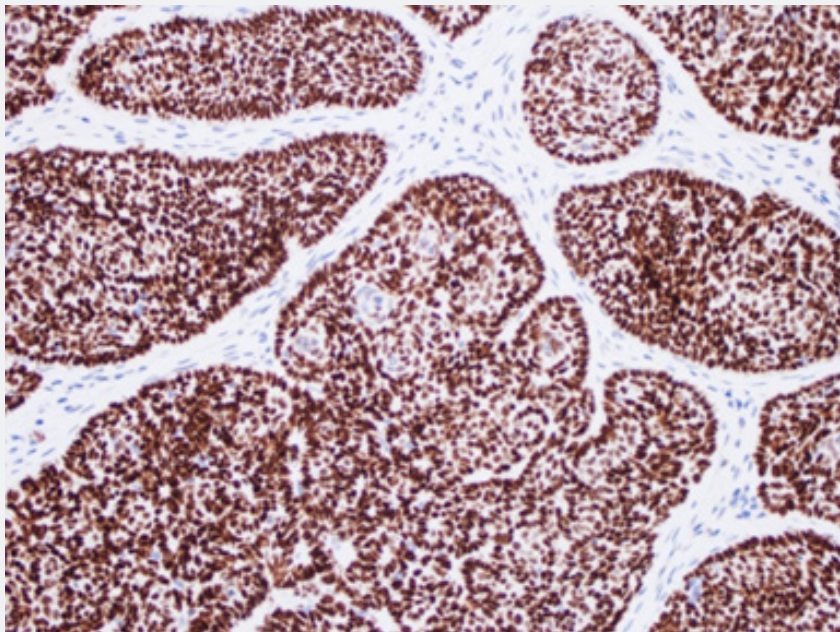


Figure 4: Higher magnification photomicrograph showing the diffuse staining with p63 immunohistochemical stain and the prominent basal palisading as highlighted by p63 staining pattern. Note the whirls being negative by p63. (H&E: 200x).

Trichoblastoma is a benign skin lesion, originating from the follicular germinative cells. Basal cell carcinoma consists of nodules and nests of basoid cells, similar to those seen in trichoblastomas, which make the histopathologic diagnosis more challenging to an unexperienced pathologist [3]. However, trichoblastomas do not present with necrosis, increased mitotic

activity, or prominent lymphocytic infiltration and basal-stromal clefting, differentiating it from basal cell carcinoma. Moreover, trichoblastoma had well defined border when compared to basal cell carcinoma, which is less structured, and exhibits specific mesenchymal stromal cells component intimately associated with the epithelial nests. Overall, clinical experience is needed to reach

the right histological diagnosis, which might explain the defects in reaching the right diagnosis in the previous cases that were reported [1].

For the management, unlike basal cell carcinoma, there are no clear guidelines in how to treat these skin lesions. Mohs micrographic surgery is reported with the lowest recurrence rates for trichoblastoma [3]. Generally, the prognosis of this benign tumor is preferred over basal cell carcinoma. Trichoblastic carcinoma is the malignant transformation of trichoblastoma. However, the exact rate of malignant transformation needs further research [4]. In our case, the patient had it for more than 10 years without complications; however, surgical resection was advised, as it was unlikely to involute spontaneously.

Conclusion

Trichoblastoma is a rare skin disease, that has predominance in the head and neck area. Reaching the right histopathological diagnosis is a must as clinical and histopathologic diagnosis can

be confused with basal cell carcinoma. Multidisciplinary approach and proper communication with the histopathologist are crucial to reach the right diagnosis. No association with specific syndromes has been reported and further studies are needed to understand the course of the disease and how to treat similar cases better.

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