Case Report

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# A Rare Case of Facial Trichofolliculoma

Dermatology Section

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## ABSTRACT

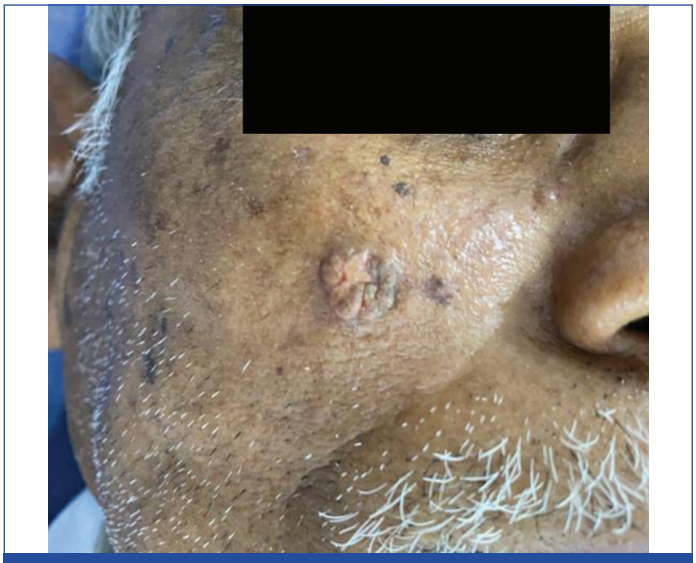
Trichofolliculoma presents as a small, indurated dome-shaped nodule with a central pore from which several, slender white hairs emerge. The lesion usually develops in adults on the head and neck region, predominantly around the nose. Biopsy reveals a large, central dilated follicle from which several smaller follicles radiate. The central follicle contains keratin and vellus hair shafts. The smaller follicles are vellus hair follicles, both normal and aberrant, in various stages of development. The tumour is encased in a fibrous sheath that is separated from the normal dermis by clefts. A large number of merkel cells are usually present in the tumour, while the lesion is easily curative through a simple excision. Here, authors presents a case of 64-year-old male patient who reported due to the uncommon occurrences of trichofolliculoma.

**Keywords:** Hair follicle tumour, Merkel cells, Vellus hair shafts

## CASE REPORT

A 64-year-old male patient presented to the Dermatology Outpatient Department with a raised lesion over right cheek lasting for two years duration. It began as a small papule which gradually increased in size to become a nodule. He had a history of burning sensation over that lesion with absence of pain, itch or discharge. There was no history of prior trauma, or any topical application. There was no associated loss of weight or loss of appetite. He was not a known case of type 2 diabetes mellitus, systemic hypertension or epilepsy. No history of malignancies was presented, neither there was any significant family history.

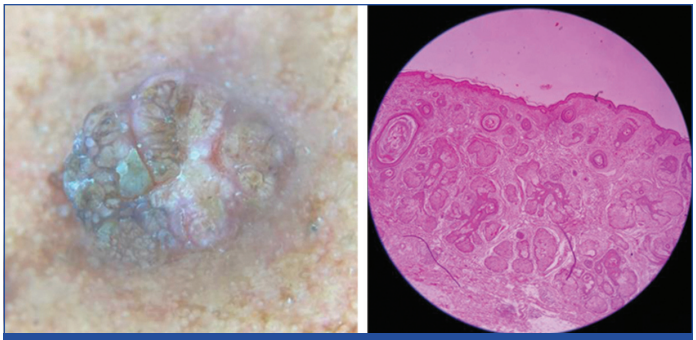
On examination, a single, well-defined, erythematous, non tender verrucous nodule measuring 4×5 cm with a central depression, was present over right malar area [Table/Fig-1]. Surrounding skin was hyperpigmented. No discharge from lesion was noted. Oral cavity, palms and soles, genitalia and nails were normal.



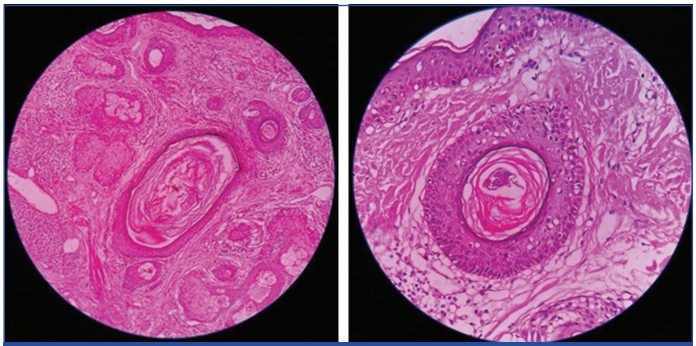
**[Table/Fig-1]:** Nodule over right malar region.

On dermoscopy, well-defined nodule with overlying papillomatous excretions, blue globules and ill-defined blue network on one end was noted. Presence of fine superficial scales and pinkish-white erythematous areas were noted at another end overlying the papillomatous excretions. Peripheral accentuation of pigmentation was seen [Table/Fig-2]. An incisional biopsy was done with complete excision of the tumour mass.

Histopathological examination of an incisional biopsy specimen taken from the lesion showed a well-differentiated tumour with keratin filled cysts lined by squamous epithelium with a branching proliferation of vellus hair follicles, and lobular proliferation of sebaceous glands. Multiple pilosebaceous units with many horn cysts were seen. Interstitium showed inflammatory cell infiltration composed of lymphocytes and histiocytes [Table/Fig-3-5]. No recurrence was observed on follow-up visits during a period of 2 months.



**[Table/Fig-2]:** Dermoscopy done on 35X magnification and polarised mode.
**[Table/Fig-3]:** On scanner view (4X)- An atrophic epidermis with the entire dermis filled with folliculosebaceous proliferations. Presence of moderate inflammatory infiltrate seen surrounding the adnexa. (Images from left to right)



**[Table/Fig-4]:** On low power view (10X)- Presence of few cystic cavities in the dermis with central keratin debris and lined by squamous epithelium. Few cystic cavities showed peripheral extensions of cells showing differentiation towards structures of the folliculosebaceous unit.
**[Table/Fig-5]:** On high power view (40X)- The inflammatory infiltrate primarily composed of lymphocytes and histiocytes. No features of atypicality noted. The epidermis and subcutis was uninvolved. (Images from left to right)

## DISCUSSION

Trichofolliculoma is a rare pilar tumour with intermediate differentiation between a hair follicle nevus and a trichoepithelioma. It presents as a single nodule approximately 0.5 to 1 cm in diameter over the head and neck region with central umbilication with tuft of fine hairs protruding out of it [1,2]. It is commonly seen in adults with no specific racial or gender predilection. The unusual locations reported for trichofolliculoma are external auditory meatus, intranasal area, genitalia, lip, and vulva [3]. The exact cause of this condition is still not known, and no association has been found with any dermatological or systemic diseases.

However, studies have found that the pluripotent skin cells undergo incomplete differentiation toward hair follicles [4]. The lesion mimics basal cell carcinoma, dermal nevus, epidermoid cyst and trichoepithelioma. Tumour undergoes changes similar to the regressing hair follicle in its well-known cycle [5,6]. Trichofolliculoma were characterised by the proliferation of abnormal cytokeratin 15-positive hair follicle stem cells, differentiating toward the outer root sheath with an attempt to make hair without proper differentiation [7]. Fine Needle Aspiration Cytology (FNAC) findings has to be supported by histopathological examination to know the hair follicular origin for definitive diagnosis. An incisional biopsy was done with complete excision of the tumour mass.

## CONCLUSION(S)

Trichofolliculomas are described as benign hamartomas. Although there are no other systemic complications, trichofolliculomas may be cosmetically unappealing in some patients, and may be responsible for psychological concerns. Management of these concerns should be addressed on an individual basis. Surgical excision of the tumour mass is the main stay of treatment.

## REFERENCES


[1] Weedon D. Weedon's skin pathology. 3rd ed. China: Elsevier; 2010. Pp. 758.
[2] Choi CM, Lew BL, Sim WY. Multiple trichofolliculomas on unusual sites: A case report and review of the literature. Int J Dermatol. 2013;52:87-89.
[3] Sayad Z, Hamidi O, Benazzou S, Boulaadas M. Trichofolliculoma: Is it a recurrence? A case and review of the literature. Sch J App Med Sci. 2021;9(6):1011-12.
[4] Misago N, Kimura T, Toda S, Mori T, Narisawa Y. A revaluation of trichofolliculoma: The histopathological and immunohistochemical features. Am J Dermatopathol. 2010;32:35-43.
[5] Bharti JN, Dey B, Gautam P, Desai P, Kamal V. Trichofolliculoma presenting as lobulated mass: A rare presentation. International Journal of Trichology. 2014;6(1):19.
[6] Phan K, Goyal S, Ahn E, Kim L, Sebaratnam DF. Trichofolliculoma of the eyelid: Systematic review. Biomed Dermatol. 2020;4(3).
[7] Al-Ghadeer H, Edward DP. Congenital sebaceous trichofolliculoma of the upper eyelid. Ophthalmic Plast Reconstr Surg. 2017;33:s60-61.



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