

CASE REPORT

Solitary Trichoepithelioma of Nose: A Rare Case Report and Review of Literature

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ABSTRACT

The trichoepithelioma is a benign cutaneous neoplasm which is derived from hair follicles. It is common in the face, but there are only three reports of the solitary occurrence on the nose. It is often not recognized because of its rarity, controversial classification, origin and biological potential. The objective of this paper is to present a case of solitary trichoepithelioma on the nose, histopathological examination and treatment. It should be considered as a differential diagnosis of a solitary lesion of nose which is confused with basal cell carcinoma. The confirmation by histopathological examination is essential.

Keywords: Basal cell carcinoma, Benign cutaneous, Neoplasms, Nose neoplasm, Trichoepithelioma.

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INTRODUCTION

Trichoepitheliomas are benign cutaneous neoplasms occurring mostly on the face, which derive from pilous follicles.¹ There are two clinical presentations: a hereditary sex-linked multiple form that usually affects the face, scalp and upper thorax of young adults; and a nonhereditary solitary form that may affect any part of the body (but mostly the face) of adults.¹ The diameter is rarely more than 2 to 3 cm.² It is an extremely rare tumor; in the literature we surveyed, there were only three cases of solitary trichoepitheliomas in the nose area.³⁻⁵

This paper reports a case of a solitary trichoepithelioma of nose that was removed surgically, followed by reconstruction the defect with nasolabial flap. We

discuss the diagnostic and therapeutic aspects of this rare skin tumor.

CASE REPORT

A 65 years old male presented with a slowly growing pigmented swelling on the dorsum of the nose for 18 months duration. It had never bled and there was no itching. There was no family history of similar lesions. The local examination revealed a pigmented brownish sessile nodular swelling, 2.7 × 2.2 cm in dimension (Fig. 1). It was firm, nontender, immobile. No enlarged lymph nodes were palpated in the neck region. The general physical and systemic examinations were normal. A clinical diagnosis of basal cell carcinoma (BCC) was made. The wide local excision of the lesion was done and the defect was reconstructed with superiorly based left nasolabial flap (Figs 2 and 3). The surgically resected specimen was sent for histopathological examination. Microscopic picture shows proliferation of tumor cells involving the entire dermis and arranged in nests and islands having peripheral palisading of the nuclei, and separation of these tumor nests by thick and thin fibrovascular stroma; horn cysts in-between the tumor nest were present (Fig. 4). Immunohistochemistry showed CD34 positive (Fig. 5). A diagnosis of trichoepithelioma was confirmed and the tumor was shown to have free margins. The patient was followed up for 24 months with no recurrences. The cosmetic result was excellent (Fig. 6).



Fig. 1: Lesion with marking for surgical excision and nasolabial flap

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Fig. 2: After wide local excision of the lesion

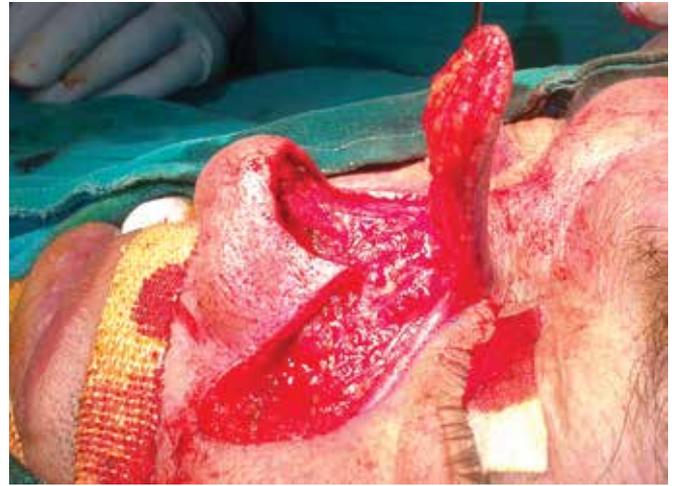


Fig. 3: Raising nasolabial flap on the left side

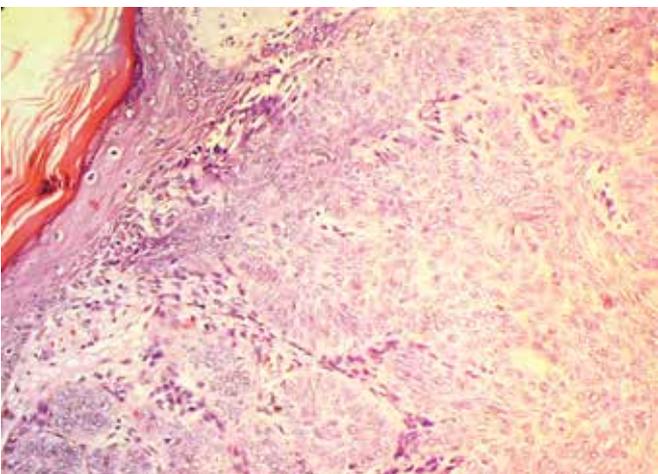


Fig. 4: Histopathological slide showing tumor cells arranged in nests and islands separated by thick and thin fibrovascular stroma

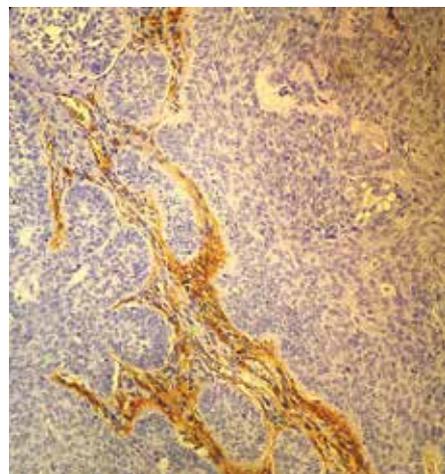


Fig. 5: Immunohistochemistry showed positive result with CD34



Fig. 6: Postoperative photograph of the patient after reconstruction

DISCUSSION

Solitary trichoepitheliomas are non-hereditary benign trichogenic tumors of very low incidence that affect adults.² We found only three cases of solitary trichoepitheliomas of nose in the literature.³⁻⁵

First case was reported by Dvir E in 1981, the patient had a growing nodular lesion on the tip of nose with the gross appearance of a basal cell carcinoma. The case was managed with complete excision of the tumor, with a postauricular full-thickness skin graft. On biopsy, the lesion was shown to be a trichoepithelioma. No recurrence of the lesion was evident 1 year later.³

Second case was reported by Riberti et al in 1993, the case was managed with complete excision of the tumor, with nasal reconstruction via the expansion of the tissue.⁴

Third case was reported by Patrocínio et al in 2008. He described a 56-year old male who had a slow-growing lesion on the dorsum of the nose and lesion was fibro-elastic consistency, and measuring 3.0 × 2.5 cm. The initial diagnosis was a basal cell carcinoma. The nodule was resected surgically and a nasogenian flap was used for reconstructing the nose. On biopsy, the lesion was shown to be a trichoepithelioma.⁵

Solitary trichoepithelioma is not distinctive clinically and may be confused with BCC, intradermal nevus, dermatofibroma, trichofolliculoma, and sebaceous

hyperplasia. Histopathology provides the final diagnosis.^{1,6} The distinction between BCC and trichoepithelioma is of clinical importance, since conventionally a BCC should be excised with a 3 to 4 mm margin of healthy tissue,⁷ whilst trichoepithelioma may only require shave biopsy or minimal resection.⁸

Jemec et al in 1999 reviewed 10 cases of trichoepithelioma of facial region and found a recurrence in only one case after surgical removal.⁹

In this case report, we also managed the case with wide local excision and defect reconstruction with nasolabial flap. In follow-up of 24 months patient is cosmetically well-satisfied and there is no recurrence.

CONCLUSION

Solitary trichoepitheliomas are extremely rare benign tumors that should be considered as differential diagnosis of basal cell carcinoma when finding a single solid nodule or papule on the face. Confirmation by excision biopsy is essential for the diagnosis and treatment.

REFERENCES

1. Boni R, Fogt F, Vortmeyer AO, Tronic BS, Zhuang Z. Genetic analysis of a trichoepithelioma and associated basal cell carcinoma. *Arch Dermatol* 1998;134(9):1170-1171.
2. Filho GB, Toppa NH, Miranda D, Matos MP, Silva AL. Giant solitary trichoepithelioma. *Arch Dermatol* 1984;120(6):797-798.
3. Dvir E. Solitary trichoepithelioma in a 70-year-old man. *Arch Dermatol* 1981;117(8):455-456.
4. Riberti C, Vaienti L, Parodi PC, Azzolini C. A nasal reconstruction via the expansion of the tissue [Article in Italian]. *Acta Otorhinolaryngol Ital* 1993;13(5):407-422.
5. Patrocinio LG, Damasceno PG, Patrocinio TG, Patrocinio JA. Solitary nasal trichoepithelioma. *Rev Bras Otorhinolaringol* 2008;74(4):637.
6. Gray RH, Helwig EB. Epithelioma adenoides cysticum and solitary trichoepithelioma. *Arch Dermatol* 1963;87(2):142-154.
7. Wolf DJ, Zitelli JA. Surgical margins for basal cell carcinoma. *Arch Dermatol* 1987;123(3):340-344.
8. Simpson W, Garner A, Collin JR. Benign hair-follicle derived tumours in the differential diagnosis of basal cell carcinoma of the eye-lids: a clinicopathological comparison. *Br J Ophthalmol* 1989;73(5):347-353.
9. Jemec B, Lovgreen Nielsen P, Jemec GB, Balsev E. Giant solitary trichoepithelioma. *Dermatol Online J* 1999;5(1):1.