Sir,

Giant solitary trichoepithelioma (GST) is a rare benign tumor of hair follicle with potential for local recurrence with possibility of malignant transformation to basal cell carcinoma (BCC) being rare. Till date, only 21 cases of GST have been reported worldwide with only 4 cases being described over the nose.

A 65-year-old male presented with asymptomatic raised lesion over the nose of 2-year duration. On examination, a firm lobulated, well-defined, immobile, nontender swelling measuring 2 cm × 4 cm was present over the dorsum of the nose. Proximal bulge is skin colored whereas the distal bulge is hyperpigmented with ulceration present over the medial margin [Figure 1]. Telangiectasias were seen over the surface of the lesion. The differential diagnosis considered was nodular basal cell carcinoma, lupus vulgaris, and sarcoidosis.

Punch biopsy from lesion revealed tumor cells in the dermis arranged in islands showing peripheral palisading arrangement [Figure 2a and b]. At places, adenoid pattern was also seen. Tumor cells were uniform, round to oval, with a moderate amount of eosinophilic to clear cytoplasm. There was no evidence of atypical mitoses, and also no section artifact was present around the tumor islands. Based on the clinical and histopathological examination, a diagnosis of GST was made. Patient was advised for surgical excision, but he denied and was lost for follow-up.

Trichoepithelioma or epithelioma adenoides cysticum is a benign appendageal tumor that shows differentiation toward hair structure.[1,2] This entity was first described by Brooke in 1892 and also described by Fordyce later.[1] Previously thought to arise from inferior segment of hair follicle is now believed to be from pluripotent cells.[1,3] Clinically, three types of trichoepithelioma are recognized, namely, solitary nonfamilial type, multiple familial type, and rarely giant solitary form.[4,5] GST is a distinct variant of trichoepithelioma measuring more than 2 cm in diameter and commonly presents in the elderly age group with equal sex ratio.[4,5] It clinically manifests as large polypoid lesions distributed commonly over the face, lower trunk, and perianal region; however pedunculated, ulcerated, and cystic forms have also been reported. In our patient, lesion was present over the bridge of the nose.

Till date, only 21 cases of GST have been reported worldwide with only 4 cases being described over the nose.[1,4]

Cytology on fine-needle aspiration shows highly cellular aspirate consisting of papillary mesenchymal bodies and frond-like pattern of basaloid cells. The epithelial component consists of uniform basailoid cells arranged in nests and adenoid pattern; cells have scanty cytoplasm and darkly stained nucleus.[4]

Histopathologically, all the three forms of trichoepithelioma are similar but not identical. GST is characterized histologically by dermal or subcutaneous tumor composed of basophilic cells arranged in lacelike, adenoid, or solid aggregates. The cells show scanty cytoplasm with darkly stained nucleus, and islands of tumor show characteristic peripheral palisading of cells. Horn cysts showing trichilemmal keratinization and papillary bodies clinch toward the diagnosis; however, they may be absent in few of the case. Papillary bodies represent abortive attempts to form papillary mesenchyme.[1,4]
Occasionally, GST can present as a pigmented lesion because of increased melanocytes activity or increased retention of pigments in basal keratinocytes. In addition to above findings, amyloidosis, inflammation, granulomas, foreign-body giant cell reactions, calcification, and apoptotic bodies can also be seen in GST\[^{3,4}\]

Histologically, GST needs to be differentiated from keratotic BCC and microcystic adnexal carcinoma. The presence of undifferentiated basaloid cells, parakeratotic cells, accumulation of amyloid-like hyalinized material, and stromal retraction around the basaloid islands with the absence of papillary mesenchymal bodies favors basal cell carcinoma. Microcystic adnexal carcinoma is a poorly circumscribed invasive dermal tumor with pleomorphic ductal epithelial cells and basaloid keratinocytes.\[^{2}\]

Immunohistochemically, the trichoepithelioma cells react with PHLDA-1, CD34, and CD10. It has potential for local recurrence and possibility of malignant transformation to BCC is very rare.\[^{4}\]

Surgical excision with or without flap, radiosurgical ablation is the treatment of choice. Adjuvant radiotherapy is indicated in cases of malignant transformation to BCC after surgical excision.\[^{6}\]

To conclude, GST is a rare trichogenic tumor with potential to local recurrence. It commonly presents in the elderly age group with equal sex ratio. Histopathologically and immunohistochemically it needs to be differentiated from keratotic BCC and other adnexal carcinomas. Surgical excision is the treatment of choice. Regular follow-up is required as it has potential for local recurrence and rarely possible malignant transformation to basal cell carcinoma.

**Declaration of patient consent**

The authors certify that they have obtained all appropriate patient consent forms. In the form the patient(s) has/have given his/her/their consent for his/her/their images and other clinical information to be reported in the journal. The patients understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

**Financial support and sponsorship**

Nil.

**Conflicts of interest**

There are no conflicts of interest.

**REFERENCES**

1. Arunagirinathan M, Mohan KR, Sivaraman J, Ashok S. Case report on giant solitary trichoepithelioma. IJCCI 2013;6:20-5.
2. Ahmed TS, Priore JD, Seykora JT. Tumours of the epidermal appendages. In: Elder DC, editor. Lever’s Histopathology of the Skin. 10th ed. Philadelphia: Lippincott; 2008. p. 857-9.
3. Krishnamurthy J, Divya K. The cytology of giant solitary trichoepithelioma. J Cytol 2010;27:99-101.
4. Teli B, Thrishuli PB, Santhosh R, Amar DN, Rajpurohit S. Giant solitary trichoepithelioma. South Asian J Cancer 2015;4:41-4.
5. Jemec B, Levgreen Nielsen P, Jemec GB, Balsev E. Giant solitary trichoepithelioma. Dermatol Online J 1999;5:1.
6. Martinez CA, Priolli DG, Piovesan H, Waisberg J. Nonsolitary giant perianal trichoepithelioma with malignant transformation into basal cell carcinoma: Report of a case and review of the literature. Dis Colon Rectum 2004;47:773-7.