

**Cutaneous metastasis - An unusual metastatic presentation of carcinoma pyriform fossa**

<sup>1</sup>Sujata Kumbhar, Professor Department of Pathology, Krishna Institute of Medical Sciences Deemed to Be University, Karad, Maharashtra.

<sup>2</sup>Shivangi Mittal, Tutor Department of Pathology, Krishna Institute of Medical Sciences Deemed to Be University, Karad, Maharashtra.

<sup>2</sup>Ramnik Singh, Tutor Department of Pathology, Krishna Institute of Medical Sciences Deemed to Be University, Karad, Maharashtra.

<sup>2</sup>Nidhi Goswami, Tutor Department of Pathology, Krishna Institute of Medical Sciences Deemed to Be University, Karad, Maharashtra.

**Corresponding Author:** Shivangi Mittal, Tutor Department of Pathology, Krishna Institute of Medical Sciences Deemed to Be University, Karad, Maharashtra.

**Citation this Article:** Sujata Kumbhar, Shivangi Mittal, Ramnik Singh, Nidhi Goswami, “Cutaneous metastasis - An unusual metastatic presentation of carcinoma pyriform fossa”, IJMSIR- May - 2022, Vol – 7, Issue - 3, P. No. 80 – 82.

**Type of Publication:** Case Report

**Conflicts of Interest:** Nil

**Abstract**

Cutaneous metastasis from hypopharyngeal cancers is rare constituting about 0.8 – 1.3 % and represent a subgroup of head and neck cancer patients who have very poor prognosis even when treated. We report a case of 54-year-old male diagnosed as carcinoma of pyriform fossa who was on radiotherapy and chemotherapy when he developed cutaneous metastases over chest wall, which initially presented as small nodule and later progressed in to a proliferative lesion.

**Keywords:** Chest wall metastasis, prognosis, pyriform fossa.

**Introduction**

Hypo and Oro-pharyngeal malignancies constitute about 1.1% of all malignancies in the world and about 3.8% of all malignancies in India [1]. On an average 65 – 70% of tumors of hypopharynx arise from pyriform sinus, which is most common subsite [2]. Distant metastasis to lung,

liver and bone are via hematogenous spread. Cutaneous metastasis are rare, they are associated with poor prognosis and advanced disease [3].

**Case report**

A 54-year-old male presented with multiple swellings over the right side of chest wall since 3 months, not associated with pain. CT scan of neck revealed a lobulated heterogeneously enhancing soft tissue density lesion measuring 3.3 x 2.5 x 1.5 cm in the right pyriform sinus extending Antero – superiorly in pre-epiglottic space, epiglottis and showing loss of fat planes with base of the tongue. Multiple enlarged discrete and conglomerated, heterogeneously enhancing cervical lymph nodes, noted in levels IA, IB, II, III bilaterally, larger conglomerated lymph node measuring 7.3 x 4.5 x 2.8 cm on right side and 3.1 x 3.0 x 2.0 cm on left side. FNAC from the chest wall nodular lesion showed neoplastic cells arranged in clusters, sheets and scattered

singly. Individual cells are round to polygonal having round to oval moderately pleomorphic nuclei with hyperchromatic to vesicular chromatin and indistinct nucleoli with moderate amount of eosinophilic cytoplasm. Background shows tumor giant cells, bizarre nuclei, few inflammatory cells, stromal fragments and RBCs. Following treatment patient had symptomatic relief at primary site, but the chest wall metastatic lesion was progressive with appearance of new nodules over adjacent areas of irradiation.

### Discussion

Cutaneous metastasis commonly present as nodules and erythematous macular lesions as such they can easily confused as an infective process or primary cutaneous squamous cell carcinomas [4]. They are usually painless and can be solitary or multiple. Cutaneous metastasis are thought to develop from hematogenous spread if they appear distally and via dermal lymphatic spread if they occur in close proximity to primary tumor [5]. Pulmonary circulation can possibly be bypassed via the azygous and vertebral venous systems and Batson's plexus therefore allowing for skin implantation. The occurrence of cutaneous metastasis is associated with a very poor prognosis. Most frequent site of metastasis are to lungs (36.4%), bone (34%), liver (23.8%) and it is dependent on the stage of primary tumor, loco regional control and tumor site. Among head and neck malignancies which metastasize to skin hypopharyngeal tumors contributed about 1%. The patient also presented with carcinoma of pyriform fossa, which metastasized as cutaneous nodules over left chest wall when the patient was being treated for the primary disease; this demonstrates the aggressive nature of the disease. Even though, the patient received palliative radiation his

survival was just 2 months posttreatment, though there is a partial response of the disease after radiation.

### Conclusion

Hypopharyngeal cancer patients fare poorly compared to other head and neck tumors. Prognosis of the patients depends mainly on the age at presentation, primary tumor site, genetic mutations and personal habits. Cutaneous metastasis in hypopharyngeal cancers is extremely rare (1%), and this is accompanied with poor outcome with average survival of 3 months after developing skin metastasis.



Fig. 1: Gross Examination

Multiple firm nodules on right side of chest wall, largest measuring 3 x 2 x 1 cm and smallest measuring 0.3 cm in diameter. Skin over nodule appears reddish and shiny.

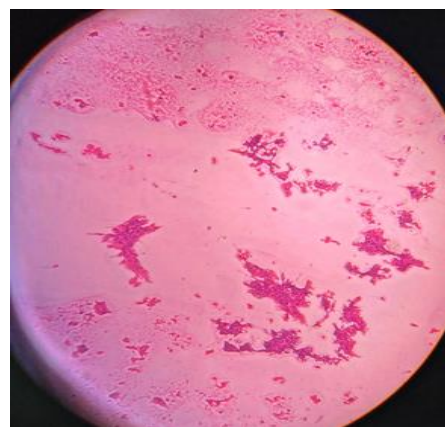


Fig. 2: H & E-stained cytology smear – 4 x resolution Shows neoplastic cells in sheets and scattered singly.

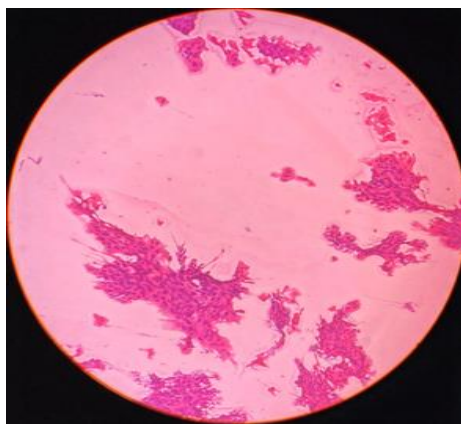


Fig. 3: H & E-stained cytology smear – 10 x resolution – Shows neoplastic cells in sheets with blue stained nuclei and eosinophilic cytoplasm.

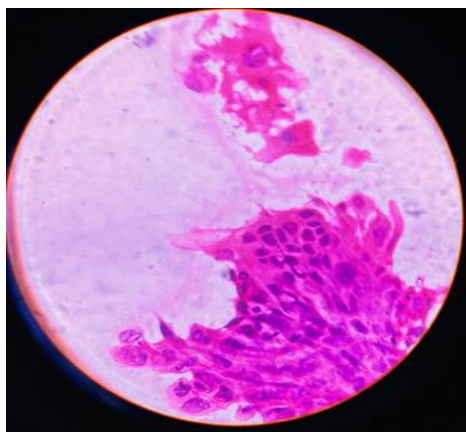


Fig. 4: H & E-stained cytology smear – 40 x resolution – Shows neoplastic cells arranged in large sheets and few scattered singly. Individual cells are large, round to polygonal with large moderately pleomorphic hyperchromatic to vesicular nuclei and scant to moderate amount of eosinophilic cytoplasm. Background shows few inflammatory cells.

#### References

1. International Agency for Research on Cancer. Globocan:2008, Available from: <http://www.globocan.iarc.fr/factsheet.asp>. [Last accessed on 2014 Mar 03].
2. Halperin EC, Perez CA, Brady LW. Hypopharynx Cancer. Perez and Brady's Principles and Practice of

Radiation Oncology: Clinical Lippincott Williams and Wilkins; 2008. p. 959-60.

3. Pitman KT, Johnson JT. Skin metastases from head and neck squamous cell carcinoma: incidence and impact. *Head Neck* 1999; 21: 560-5.

4. Yoskovitch A, Hier MP, Ok rainec A, Black MJ, Rochon L. Skin metastases in squamous cell carcinoma of the head and neck. *Otolaryngol Head Neck Surg* 2001; 124: 248-52.

5. Caloglu M, Uygun K, Altaner S, Uzal C, Koçak Z, Piskin S. Nasopharyngeal carcinoma with extensive nodular skin metastases; A case report. *Tumori* 2006; 92: 181-4.