



## Case Report

# A case report of cutaneous metastasis in locally advanced hypopharyngeal cancer

Poonam Sehar<sup>1</sup>, Romi Kant Grover<sup>1\*</sup>, Shubham Mittal<sup>1</sup>, Pardeep Garg<sup>1</sup>

<sup>1</sup>Dept. of Radiation Oncology, Guru Gobind Singh Medical College & Hospital, Faridkot, Punjab, India



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### ABSTRACT

Cutaneous metastasis from head and neck cancers are uncommon, accounting for less than 1% for distant metastasis in head and neck cancers. It can be single and discrete or it may present as multiple lesions at different anatomic sites. There is a correlation between the frequency of cutaneous metastasis and the type and prevalence of primary cancer. Head and neck squamous cell carcinomas are aggressive tumors with metastasis occurring in up to 15-20% cases. However, they rarely metastasize to skin and the reported incidence is about 0.8-1.3%. Very few cases of distant cutaneous head and neck SCC (HNSCC) metastases have been described and are usually multiple. Underreporting is likely in cases of simultaneous occurrence with lung, bone and brain metastases. Cutaneous distant metastases signify a poor prognosis and 1-year survival is 0%.

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## 1. Introduction

Cutaneous metastasis from head and neck cancers are uncommon, accounting for less than 1% for distant metastasis in head and neck cancers.<sup>1</sup> It can be single and discrete or it may present as multiple lesions at different anatomic sites. There is a correlation between the frequency of cutaneous metastasis and the type and prevalence of primary cancer.

Head and neck squamous cell carcinomas are aggressive tumors with metastasis occurring in up to 15-20% cases. However, they rarely metastasize to skin and the reported incidence is about 0.8-1.3%. Hypopharyngeal carcinomas represents a small sub-group of HNSCC and cutaneous metastasis are extremely rare. Stoma recurrence, permeation nodules and cutaneous mets in head and neck or trunk areas from nearby head and neck are by far the more common. Conversely, distant Cutaneous metastasis to the lower part of the body are exceedingly rare in the absence of iatrogenic

tumor seeding.<sup>2</sup> Sister Mary Joseph umbilical nodules are well known skin metastases of gastro-intestinal cancers, ovarian cancers, or lymphomas.<sup>3-5</sup> Very few cases of distant cutaneous head and neck SCC (HNSCC) metastases have been described<sup>6</sup> and are usually multiple.<sup>7,8</sup> Underreporting is likely in cases of simultaneous occurrence with lung, bone and brain metastases. Cutaneous distant metastases signify a poor prognosis and 1-year survival is 0%.<sup>9</sup>

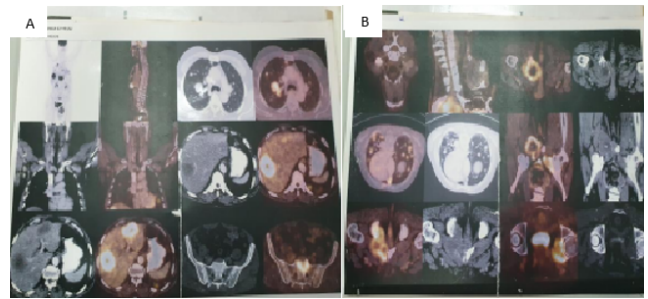
## 2. Case Report

A 60 year male presented to our opd with chief complaint of difficulty in swallowing right neck swelling. Endoscopy revealed a locally advanced unresectable hypopharyngeal tumor centered on her right pyriform sinus. Histological examination right side cervical lymph node showed metastatic carcinomatous deposits likely squamous cell carcinoma. On cervicothoracic contrast enhanced computed tomography (CT) of head and neck, his primary tumor was associated with right cervical lymph node of size 2.6×5.4cm with heterogeneous enhancing circumferential

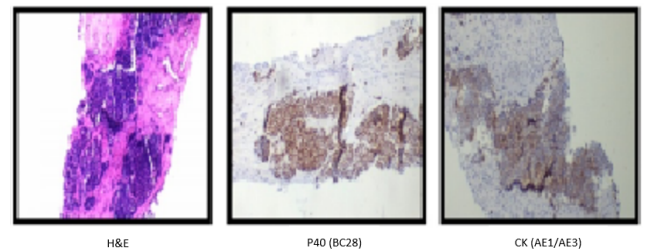
\* Corresponding author.

E-mail address: [shebbu2594@gmail.com](mailto:shebbu2594@gmail.com) (R. K. Grover).

growth in right pyriform fossa causing right pyriform sinus narrowing of right vallecula is also effaced. Superiorly extended till epiglottis and closely abutting epiglottis on right side. Inferiorly involving right false vocal cord it is seen to extend across the mid-line and is causing thickening of posterior wall of laryngo-pharynx the mass measures approximately 4.7 cm craniocaudal extent (T3N2aM0). He underwent two cycles of upfront systemic chemotherapy with injection paclitaxel and injection carboplatin. Clinical response was there with the reduction of cervical lymph nodes. Followed by the concurrent chemoradiotherapy with dose of 70Gy/35# with concurrent cisplatin 50 mg weekly six cycles completed on 24 Feb 2021. After that patient was kept on regular follow up. Follow up imaging after 3 months of completion of treatment, showed no residual and recurrent disease. After one year of follow up, patient presented with nodular subcutaneous swelling on medial side of left thigh, which was progressively increasing in size over 3-4 weeks. On examination, a 6 cm well-circumscribed smooth fleshy inflammatory nodule was found. He underwent through evaluation prior to any further treatment. PET-CT whole body showed no obvious lesion in bilateral pyriform sinus. FDG avid /non avid nodular lesion in bilateral lung fields with metabolically active lesions in liver and bones suggestive of disseminated mets. It also revealed focal uptake of radiotracer in thigh lesion which was highly suspicious for malignant lesion. Biopsy from thigh lesion suggestive of positive for malignant cells on which IHC test was done showed positivity for p40(BC28) and CK(AE1/AE3) suggestive of metastatic basaloid squamous cell carcinoma. Then patient was started on palliative treatment in view of progressive disease. Patient received systemic chemotherapy with triple agent regimen consisting of Inj. Docetaxel, Inj. Cisplatin and Inj 5-FU for D1-D4. On treatment patient also developed a right axillary swelling which was approximately of size 2×3 cm well-circumscribed smooth fleshy inflammatory swelling. Patient is on close follow up.(Figures 1, 2 and 3)



**Figure 2:** A,B: shows PET-CT scan report showing distant metastasis.



**Figure 3:** Immunohistochemistry: Squamous cell carcinoma localized in dermis and hypodermic.)

### 3. Case Discussion

Cutaneous metastasis are often sign of widespread disease. However, in 6.4-7.8% of cases they precede other distant metastasis. They may also represent failure of ongoing treatment, tumor relapse or more rarely be the first sign of an unexpected internal malignancy.

Extension to the skin is uncommon except for contiguous involvement, including permeation nodules in the head and neck area.<sup>2,10,11</sup> Tumor implantation after surgical procedures have also been described. However, the incidence of cutaneous metastases is probably underestimated because they are usually associated with other life-threatening metastases. Few cases of solitary distant cutaneous metastases have been described. Most lesions present as nodules or erythematous macular lesions that may mimic an infectious process. Most metastases are confined to the deep dermis and spare the epidermis, but there are some cases of abutment of the epidermis or ulceration. The diagnosis of a metastasis from a head and neck primary cancer is supported by the presence of a heavy dermal component that has no connection with the epidermis. Necrosis, inflammation and lymphovascular invasion can be associated.

Tumors of the hypopharynx/oropharynx show similar characteristics to laryngeal and nasopharyngeal cancers when they metastasize to skin and occurred distant from the head and neck in the back and the abdomen. In most of the cases presented as one or more nodules.<sup>10-13</sup> Single



**Figure 1:** A: Shows patient; B: Physical examination: 5cm well-circumscribed large nodule on in medial aspect of left thigh.

reports of macular SM and vasculitic lesions have also been observed from hypopharynx/oropharynx tumors and, in both cases, were found at distant sites in the skin of the back or the abdomen.<sup>10,14</sup> Cutaneous distant metastases signify a poor prognosis and 1-year survival is 0%.<sup>9</sup>

#### 4. Source of Funding

None.

#### 5. Conflict of Interest

None.

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#### Author biography

**Poonam Sehar**, Assistant Professor

**Romi Kant Grover**, Assistant Professor

**Shubham Mittal**, Assistant Professor

**Pardeep Garg**, Associate Professor and Head

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