

Skull Bone Metastasis from Carcinoma of Oral Cavity

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Abstract

We report a case of carcinoma tongue, which presented with calvarium metastasis during treatment, as a part of distant spread. This patient was then treated with palliative chemotherapy.

Keywords: Bone metastasis; Carcinoma tongue.

Introduction

Oral cavity tumours comprises roughly 30% of all Head & Neck Tumours, out of oral cavity tumours, carcinoma of anterior tongue is most common in India. The ICMR Registry reports 56000 new cases are estimated to occur each year & about 100000 cases in population in any given year.[1] The Incidence of Tongue cancer among men is higher than the women, but among women, highest incidence of Tongue cancer in India.[2] Main route of spread is local infiltration or by lymphatic route and most common neck node metastasis. Hematogenous metastasis is rare. Distant metastases occur in 10% of oral carcinoma.[3] Out of which 66% distant metastasis to lungs, 22% to bones and 9.5% to liver.[4] Metastasis to calvarium from these tumour are rare and reported in few series. This case was unique and developed calvarium metastasis during treatment.

Case report

A 56 year old lady presented to a local ENT doctor with complaints of non healing ulcer

in her lateral border of tongue since 3 months duration, there was no associated complains. On oral examination suggestive of small ulcer over tongue, punch biopsy was taken, histopathology report showed moderate dysplasia. Patient was kept on regular follow up. But after one month follow up patient defaulted. 4 months later she developed difficulty in swallowing, difficulty in speech and opening of mouth along with right upper neck swelling.

At the time of examination, she was average built with Karnofsky performance status 80. Examination of oral cavity showed grade III

Fig1: Intraoral view showing ulceroproliferative lesion on left lateral border of tongue



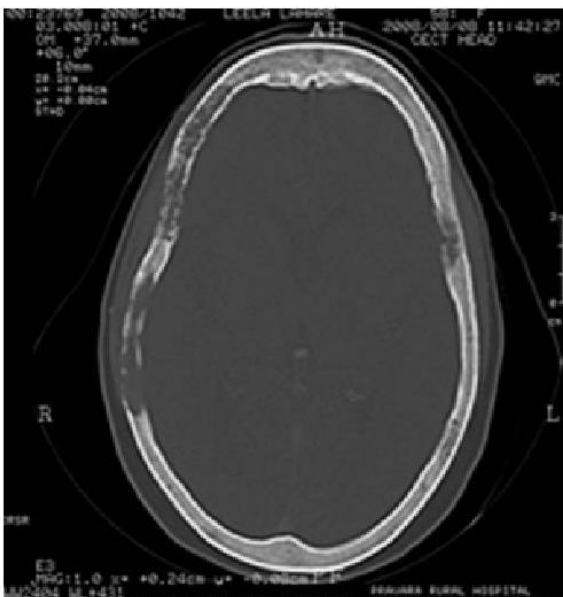
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trismus, tongue movement restricted with ulcero-proliferative mass 3×4 cm² found at lateral border of tongue extending up to midline and posteriorly up to last molar. Right submandibular lymph node palpable 3×2.5 cm² fixed to underline structure, hard in consistency. Right upper cervical lymphnode 2.5×3.5 cm² fixed to underline structure and hard in consistency (Fig. 1). She was investigated and FNAC was done from swelling present on right cervical region, showed poorly differentiated squamous cell carcinoma. The patient was staged as T4N2bMo stage IVA disease. After baseline investigation, planed for 3 cycle neo-adjuvant chemotherapy followed by radical radiotherapy. She received Paclitaxel (175 mg/m²) and Cisplatin (75 mg/m²) at three weekly intervals. She was hospitalised for chemotherapy, which was given with proper hydration along with antiemetic cover. She tolerated chemotherapy well and after receiving two cycle of Chemotherapy, patient developed severe vomiting and headache which was not subsided by antiemetic and analgesics. She was investigated with CECT of brain, which shows multiple osteolytic bone lesions involving the calvarium, largest measuring 1.53 cm in width & 7.16 cm in length (Figure 2). She was diagnosed to have

Fig 2: Contrast enhance CT Scan of brain showing multiple metastatic lesion.



progression of disease. Second line chemotherapy started injection Docetaxel (75mg/m²) and Cisplatin (75mg/m²) and also started Biphosphnate injection (Zolodronic acid 4 mg) at 4 weekly intervals. She is presently on this schedule, tolerating well and had obtained 80-90% symptomatic relief primary as well as secondary.

Discussion

Carcinoma tongue should not considered a disease that remains confined to head and neck area. Like other head and neck malignancy, base of tongue has significant potential to develop distant metastasis. Bony metastasis are rarely in Literature; Teresa I. Gloria-Cruz *et al*[5] found that most common source of temporal bone metastasis is breast (21.3%), lung (12.8%), prostate (10.6%), skin tumor (8.5%), cervix (6.4%) and oral cavity (2.1%) out of 47 patients evaluated for primary site and adenocarcinoma was the most common histopathological type of tumor found to metastasize to the temporal bone. Maddox's *et al*[6] study found that kidney was the most common source of metastasis to temporal bone. Berlinger and coworkers[7] studied pattern of involvement use as a guide. These included:

1. isolated metastasis from a distant primary tumour,
 2. direct extension from regional primary tumour,
 3. direct meningeal carcinomatosis,
 4. leptomenigeal extension from an intracranial primary tumor, and
 5. leukaemic or lymphomatous infiltration.
- In our case it was hematogenous spread. Belal *et al*[8] and Adams *et al*[9] reported that more females than males cases of temporal bone metastasis.

Most of the series showed that most common tumour metastasize to calvarium from adenocarcinomas, it was rarely from squamous

cell carcinoma. We reported metastasis from squamous cell carcinoma and primary site is oral tongue.

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