



Case Report:

A Rare Case of Gastric Carcinoma with Oral Metastasis

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Abstract: Oral region is an uncommon site for metastatic tumour cell colonization and usually evidence of wide spread disease. It accounts for only 1% of all oral malignant neoplasm's. They mainly involve the bony structures (particularly the mandible), whereas primary metastases to soft tissues are extraordinarily rare (only 0.1% of oral malignancies). The breast is the most common primary site for tumors that metastasize to the jawbones, whereas the lung is the most common source for cancers that metastasize to the oral soft tissues. We are reporting an extremely rare case of carcinoma stomach with oral soft tissue metastatic lesion in the upper alveolar ridge extending to involving the upper labial mucosa extending up to the premolars on right side on the gingivo- buccal sulcus.

Key Words: Oesophago gastric duodenoscopy; Fine needle aspiration cytology; Immune histochemistry

Introduction:

Oral region is an uncommon site for metastatic tumor cell colonization and usually evidence of wide spread disease. It accounts for only 1% of all oral malignant neoplasms. They mainly involve the bony structures, particularly the mandible, whereas primary metastases to soft tissues are extraordinarily rare, accounts only 0.1% of oral malignancies. The most common sites of soft tissue involvement are the gingiva, tongue, lips, and the buccal and palatal mucosa. The breast is the most common primary site for tumors that metastasize to the jawbones, whereas the lung is the most common source for cancers that metastasize to the oral soft tissues. Primary tumors are mainly from lung, breast, kidney and colon which accounts for 70% of all cases, while stomach accounts for only for 2.5% of all cases.[1]

Oral metastatic lesions (in soft tissues) commonly manifest as progressive discomfort, pain, bleeding, superadded infection, dysphagia, interference with mastication, and disfigurement. Rarely do they also present with swelling, paresthesia, numb chin syndrome or even being asymptomatic with an accidental discovery.[2]

Oral metastasis carries a grave prognosis for the patient because it represents advanced disease. Affected patients usually die within a year.[3]

Case Report:

A 50 years old male patient, known alcoholic & smoker, was referred from a dental college with history of swelling in the anterior alveolar ridge. It had been clinically diagnosed as pyogenic granuloma and the incisional biopsy had been reported as metastatic adenocarcinoma, following which the patient was subjected to oral gastroduodenoscopy (OGD) that revealed proliferative growth at cardia extending into lesser curvature (Figure 1). In our institution, slide and block review showed that biopsy from stomach had moderately differentiated adenocarcinoma, and biopsy from anterior alveolar ridge growth had metastatic adenocarcinoma with extensive necrosis.

Patient presented to us with history of swelling in the oral cavity of 5 months duration, associated with pain abdomen and vomiting of 3 months duration and haemetemesis of 1 week duration. Clinical examination showed Ulceroproliferative growth 4x4 cms in anterior aspect of the upper alveolus extending to involve the upper labial mucosa extending upto the premolars on the right side involving the palate not crossing the midline, involving the gingivo buccal sulcus & gingivo labial sulcus (Figure 2). Routine blood investigations were within normal limits. Echocardiogram showed ischemic heart disease with left ventricular segmental hypokinesia with ejection fraction of 45% for which he was started on medication under a cardiologist care.

OGD showed proliferative growth at the cardia, extending into lesser curvature. CT Scan abdomen showed malignant wall thickening of the gastro esophageal junction, cardia and lesser curvature with perigastric & peripancreatic lymphadenopathy with multiple liver metastasis. CT scan oral cavity (Figure 3) showed growth at anterior aspect of upper alveolus extending into gingivo buccal sulcus & gingivo labial sulcus, eroding the lateral nasal wall, thickening of the nasal wall mucosa seen, not involving the palate.

Biopsy of the stomach showed moderately differentiated adenocarcinoma (Figure 4), biopsy of the oral growth and FNAC liver showed metastatic adenocarcinoma. Immunohistochemistry (IHC) showed focal positivity for CK7 and CK20 which confirmed the gastric primary (Figure 5).



Figure 1: OGD showing proliferative growth at cardia



Figure 2: Ulceroproliferative growth 4x4 cms on anterior aspect of the upper alveolus extending into gingivo buccal sulcus and gingivo labial sulcus.

Discussion:

The oral region is an uncommon site for metastatic lesions.[4] This is because the jawbones have little red marrow hence are not preferred site for bony metastasis, however active marrow may rarely be found in posterior area of mandible. In dentulous patients, 80% of metastasis involves the gingiva; probably due to rich capillary network of the chronically inflamed gingiva that entraps malignant cells.

In edentulous patients metastatic lesions commonly involve the tongue and the alveolar mucosa.[5]

The diagnosis is always based on histological examination and immunohistochemical testing from the biopsy specimen of both primary and metastasis. This helps in ruling out several primary intraoral tumors especially those originating from salivary glands like the primary ductal carcinoma of salivary gland, and also in differentiating from other metastatic primary arising from lung, colorectal, hepatocellular and genitourinary system.[6,7]

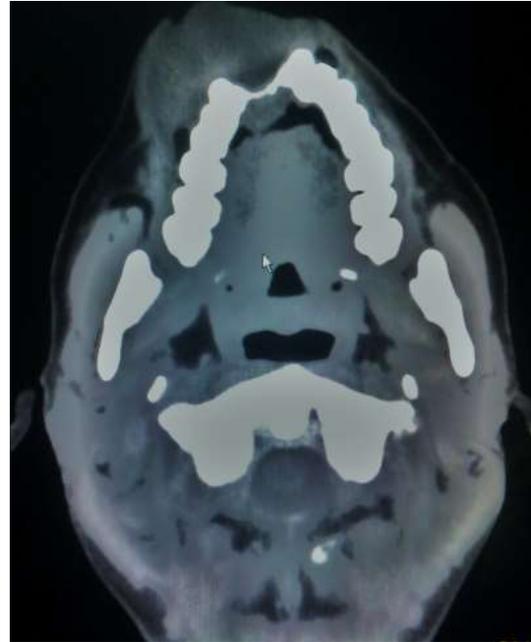
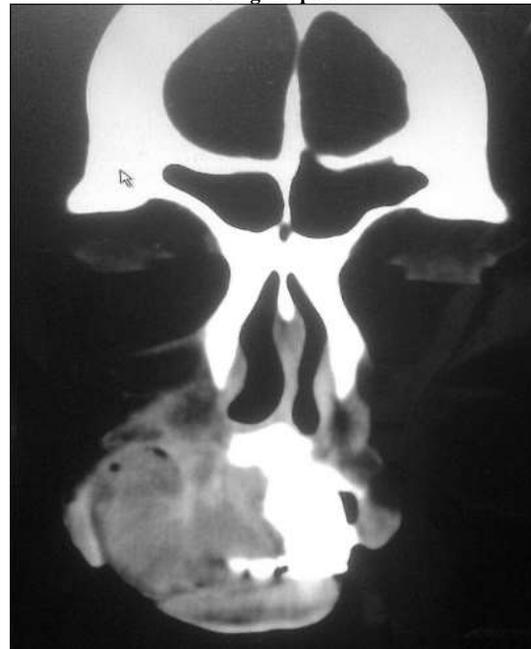


Figure 3: CT scan of oral cavity showing the growth at anterior aspect of upper alveolus extending into gingivo buccal sulcus & gingivo labial sulcus, eroding the lateral nasal wall, thickening of the nasal wall mucosa seen, not involving the palate.



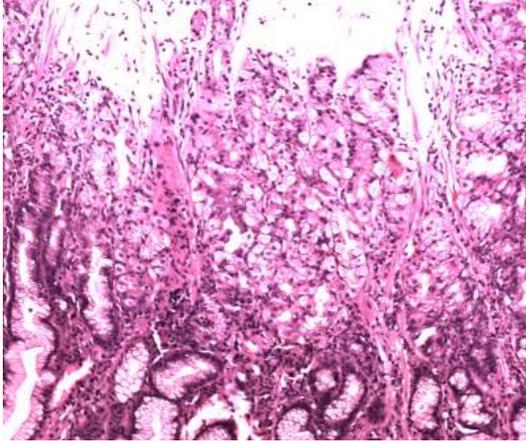


Figure 4: Fragments of gastric mucosa with intestinal metaplasia, with few fragments showing tumour cells arranged in sheets; cells are round to oval with hyperchromatic nuclei, nucleoli & moderate amount of amphophilic cytoplasm – suggestive of moderately differentiated adenocarcinoma

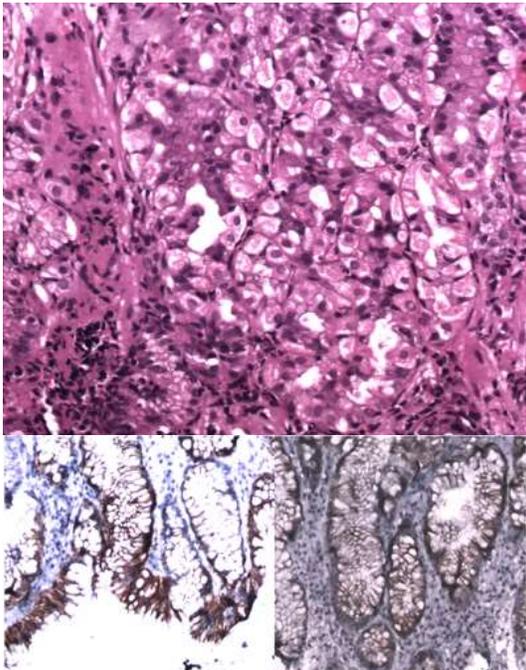


Figure 5: IHC showing focal positive for CK7 and CK 20
As the patient had metastatic disease, he received single agent palliative chemotherapy. However patient expired 3 weeks later after 1st cycle of chemotherapy due to a cardiac event.

Oral metastasis indicates widespread disease and poor prognosis.[8] Treatment modalities are limited to palliation to improve the patient's quality of life.

The discovery of an oral metastasis sometimes leads to the detection of an occult malignancy in other body sites, and so it is extremely important to identify it correctly, first clinically and then pathologically for better patient care.

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