



Gastric carcinoma presenting with mandibular metastases-a rare presentation

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Abstract :

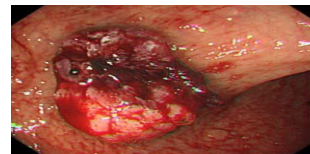
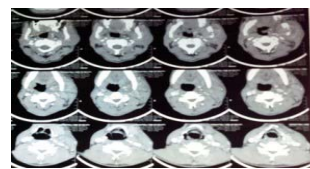
Metastatic tumors of the oral cavity are rare, representing about 1 of oral tumors. Seventy percent of all tumors metastatic to the oral and maxillofacial region are adenocarcinomas, most commonly originating from the breast, kidney and lung. Carcinoma of stomach is generally described as one of the captains of men of death. Usual sites of metastasis from gastric adenocarcinoma are direct invasion of adjacent organs, peritoneal dissemination, lymphatic metastasis and hematogenous spread. A primary carcinoma of the stomach may rarely metastasize to the oral cavity, it is important to bear this possibility in mind because such conditions may mimic a benign disease. This article describes a case of metastasis of gastric adenocarcinoma to the mandible in a 70-year-old male.

Keyword :

Endoscopic biopsy, gastric adenocarcinoma, mandibular metastasis

Case report

A 70-year-old male patient reported to our department with chief complaint of a swelling in the left jaw region since 3-4 months. Patient noticed a small swelling at the same region before 4 months gradually increased and attained the present size. It was not associated with pain or any other symptoms. Swelling of size 6x6cm situated in the left mandibular region. It is hard with irregular surface had intra oral extension, no significant cervical lymphadenopathy was noticed. Incision biopsy showed features suggestive of metastatic adenocarcinoma. CT showed osteolytic lesion in the left mandible most probably a metastatic lesion. On metastatic work up upper GI endoscopy showed exophytic lesion in the fundus of the stomach whose biopsy came as poorly differentiated adenocarcinoma matched with mandibular biopsy. As the disease is metastatic palliative chemotherapy and radiotherapy was advised in multidisciplinary meeting.



Discussion

Metastatic lesions to the oral cavity most commonly originate in the lung (26.7%). Seventy percent of all tumors metastatic to the oral and maxillofacial region are adenocarcinomas, most commonly originating from the breast (30.4%), kidney (15.6%) and lung (14.8%). These tumors tend to involve the hard tissues more often than the oral soft tissues (2:1 ratio, respectively). Carcinoma of stomach is generally described as one of the "captains of men of death". Adenocarcinoma is the commonest malignant tumor of the stomach. Males are more commonly affected than females with male/female ratio varying to 2:1 or more at the age of 60 years. From an epidemiological point of view, environmental factors implicated in gastric cancer include low socioeconomic status, high intake of salt, dried or pickled food, smoking and alcohol consumption. Genetic predisposition is also seen in some cases. Precancerous conditions include chronic gastritis with atrophy and intestinal metaplasia, post gastrectomy gastric stump, gastric adenomas and Menetrier's

disease. Clinical symptoms or signs include dyspepsia, anorexia, weight loss and hematemesis, or obstruction of gastric inlet or outlet but these are rarely striking until the tumor has advanced, hence overall prognosis is poor. Gastric adenocarcinoma usually metastasizes by direct invasion, peritoneal dissemination, lymphatic spread and rarely by hematogenous route. Spread to Virchow's nodes despite being well recognized is uncommon. Hematogenous spread to distant organs may occur in absence of lymphatic spread. Other sites of metastasis include lungs, bone, skin, brain and liver (most common). The mechanism by which tumors can spread to the oral cavity is poorly understood. One possible route for blood-borne metastases to the head and neck area is the Batson's plexus: A valveless vertebral venous plexus that might allow for the retrograde spread of tumor cells, bypassing infiltration through the lungs. There is no scientific evidence regarding the possibility, that direct seeding of the tumor cells in the anterior maxilla may occur due to gastric reflex, as in direct seeding of malignant cells from the oral cavity into lung parenchyma. Metastatic involvement of mandible and maxilla is not uncommon as a part of generalized metastasis from carcinoma of breast, lung and kidney.

Metastasis is more common in females compared to males and most common site is the molar region of the lower jaw. When mandible is involved most common symptoms are pain, swelling, anesthesia or paresthesia of inferior alveolar nerve. In 30% patients with metastasis to jaw bones, jaw metastasis is the first manifestation of the malignancy. When a malignancy metastasizes to the oral and perioral tissue, the disease is usually advanced and the prognosis is therefore poor. Oral pathologists play a key role in histological diagnosis of a patient with cancer of unknown primary and in differentiating primary intraoral malignancy from metastatic tumors. Our case was a rare presentation of its kind. The metastasis was seen at mandibular region from poorly differentiated gastric adenocarcinoma in a 70-year-old male in contrast to the literature review. Investigation of the mandibular metastases usually include computed tomography, bone scan to rule out other occult metastases, histological confirmation by tissue biopsy and alkaline phosphatases. Treatment of mandibular metastases is palliative to alleviate the pain. radiotherapy forms the mainstay of treatment. surgical palliation is rarely indicated in case of severe trismus. A general dentist or primary care physician may refer suspicious intraoral lesions to the periodontist for further evaluation. The periodontist may be in the unique position to be the first oral health care provider to evaluate and biopsy suspicious intraoral lesions. While rare, primary and metastatic lesions occur approximately 1-3% of the time it is very important that a thorough soft and hard tissue examination be performed as part of an initial periodontal evaluation. Conclusively, because of the rareness of oral metastases, their diagnosis is challenging for both the clinician and the pathologist. Benign looking cysts and an osteolytic lesion in the mandible can be the first sign of metastatic adenocarcinomas to the oral cavity, hence metastatic lesions should always be considered as a differential diagnosis even if the lesion has a benign appearance. The criteria for metastatic tumor diagnosis is:

- The primary must be identified and verified histologically
- Metastatic tumors must match the histological subtypes as that of the primary tumor
- The chances of direct spread locally from the primary tumor should be excluded.

The prognosis for patient with metastatic carcinoma of the jaws is grave; with a dismal 10% 5-year survival and more than two-thirds of the patients die within a year. In our case the patient died 2 months after reporting to us.

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