

Metastatic Jaw Swelling as the Manifestation of Leiomyosarcoma of Uterus- A Case Report

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Summary:

Metastatic tumor in oral region is uncommon and may occur in the oral soft tissues or in the Jaw bone. Because of their rarity, metastasis in oral cavity are challenging to diagnose and treat. Oral metastasis is associated with poor prognosis. This case report is of a 45 year old female with a small pedunculated swelling on the left side of the hard

palate in the molar region for 30 days. Incisional biopsy revealed metastatic leiomyosarcoma with possible primaries in the uterus. Metastasis in the right lung and liver was also diagnosed. Palliative chemotherapy was started but the patient died after two weeks of diagnosis after receiving the first cycle of chemotherapy.

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Introduction:

Metastasis to the oral cavity is uncommon and constitutes about 1 % of all oral malignant tumor^{1,2,3,4}. About 1 % of the malignant tumors of the body metastasize to the oral cavity⁵. In the absence of any other metastasis isolated tumor seedling of oral tissues are extremely rare and constitutes 0.1%^{6,7}. This metastatic jaw tumor usually comes from lung, breast, genital organ, prostate, thyroid, kidney, bone and adrenals. Intra abdominal leiomyosarcoma commonly metastasize into the liver (65%), peritoneum (21%), lymph nodes (6%), bone (6%) and lung (2%)⁸. This report describes a case of

Leiomyosarcoma of uterus metastasized, to the soft tissue of upper jaw which is very rare.

Case report:

Mrs. Rahima khatun, a 45 years old woman from Pabna reported to the Oral and Maxillofacial Surgery department of Dhaka Dental College and Hospital with the complaints of a swelling on the right side of the posterior palate for 1 month with masticatory problem. The swelling was growing rapidly and was associated with pain. She had history of bleeding from the mass during mastication. Past medical history revealed the history of hysterectomy 5 months back in a private clinic of Pabna on the imaging based diagnosis of Fibroid uterus but no excisional biopsy was done. She had severe low back pain, pain on the right leg, chest heaviness but no cough or hemoptysis. She had the history of betelnut chewing, 4-5 leaves per day, for the last 10 years.

Physical examination showed an obese and anxious looking middle aged lady with moderate anemia. Her recorded blood pressure and pulse rate was 160/110 mm of Hg and 80 beats/ minute respectively. No sign of ascites or clubbing was seen but her right leg was edematous. No extra oral asymmetry was seen due to the swelling. Intra orally a soft mass was seen on the right side of the palate in the molar area which was pedunculated, pinkish in color, surface was smooth but ulcerated, non tender, measuring about 4cm X 2.5 cm. Regional lymph node was not palpable. On examination, the chest percussion note was dull over the lower right lung and the liver was palpable which was about one

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finger breadth from the right costal margin. Orthopantomogram showed soft tissue shadow with no underlying bony erosion. ESR was 25 mm in first hour and liver function test showed normal enzyme level with INR of 1.25. Incisional biopsy reported spindle cells arranged in interlacing fascicles compatible with leiomyosarcoma suggesting metastasis with possible primary in uterus. Ultrasonography of whole abdomen revealed enlarged grossly heterogenous liver with multiple space occupying lesion (secondaries) with absence of uterus. Chest radiograph showed dense oval opacities in right para cardiac region and coin shadow was seen in the right lower region of the lung with pleural effusion. X-ray lumbosacral spine showed lumbo sacral spondylitis. CT guided FNAC or liver biopsy was not performed due to poor general condition of the patient. Patient died after first cycle of chemotherapy that is two weeks after diagnosis.



Fig-1: Intra oral photograph the swelling indicated with arrow

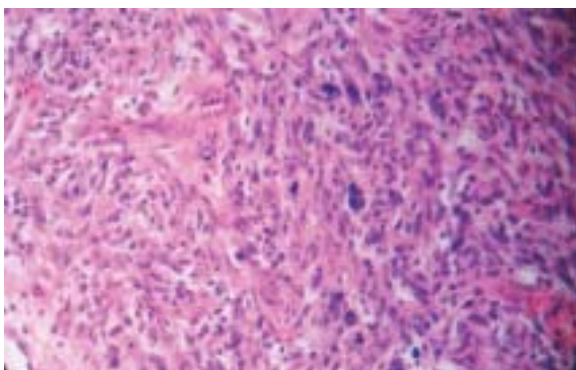


Fig.-2: Low power microscopic view of oral lesion

Discussion:

Tumors that metastasize to the oral soft tissues are very rare. The majority of the oral metastasis occur in the jaw bone (90%) and only 5% in the oral soft tissues⁵. Of the oral soft tissues 5% occur in the tongue, 4% in the gingiva and cheek and 1% elsewhere⁵. Oral metastasis arises as a result of secondary spread from other metastatic lesions especially the lungs. In about 30% of oral metastasis, lung is the first site of metastatic disease. In such cases, the tumor cells bypass filtration by the lungs. Any increase in intrathoracic pressure directs blood flow into the valveless vertebral venous plexus from the azygous and caval venous system. This accounts for the increased occurrence of metastases from lung in the head neck area and axial skeleton⁹. Pathogenesis of metastasis to oral soft tissue is due to the rich capillary network of chronically inflamed mucosa, especially of the gingiva that can trap malignant cells. These capillaries contain fragmented basement membrane through which tumor cell can easily penetrate¹⁰. For the most metastatic jaw tumor the primary tumor is in the breast (24%), genital organs (17%), lung (1296), kidney and bone 10% each¹⁰. The report describes a case of metastatic leiomyosarcoma of oral cavity with possible primary in the uterus which is very rare. Metastasis from leiomyosarcoma to the head-and-neck, and, to the palate in particular, is unusual¹¹. We had to depend on the histopathology of the presented oral lesion and other history and metastatic feature for the diagnosis of primary site. CT guided FNAC and liver biopsy may have helped for diagnosis. But in this reported case it was not done due to poor general condition of the patient. Oral metastasis is considered a late complication and is commonly associated with multiple organ metastases. Oral metastasis can grow rapidly causing pain, difficulty in chewing, dysphagia, disfigurement and intermittent bleeding, leading to poor quality of life^{1,12-16}. Oral metastasis is an ominous prognostic sign and is associated with poor prognosis with a median survival of 4 months¹²⁻¹⁶. So treatment is aimed at palliation of symptoms. In this case the patient was given chemotherapy and the lesion was reduced in size after the first cycle of chemotherapy but the patient died after

2 weeks of diagnosis. From the reported case it is recommended that all the oral lesions should be correlated with the thorough clinical examination and investigation of the general body condition especially when suspected for metastatic jaw swelling and any resected specimen must be sent for histopathology which may limit the subsequent disease sequelae.

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