## **Letter to Editor**

## Metastatic oral soft-tissue lesions: An incidental finding in four cases

Dear Editor,

Distant metastasis of malignant tumors to the oral cavity is very rare and accounts for 1-1.5% of all malignant oral tumors.<sup>[1]</sup> These oral metastatic tumors are found to be the first sign of metastatic spread in 25% of cases and in 23% of cases they are an indication for unidentified primary malignancy of a distant site. Metastasis to soft-tissues of the oral cavity is extremely rare when compared to metastasis to the jaw bones.<sup>[1]</sup> Hence, the diagnosis of these types of metastatic lesions can often be deceiving and present a great challenge. We report here four unusual cases who had lesions of the oral cavity, which were thought to be hyperplastic lesions or benign tumors. A 49-year-old male patient reported to our department of oral and maxillofacial surgery with  $2 \times 2$  cm circular, slow growing, painless, non-tender, firm swelling in the left side at the junction between hard and soft palate from past 2 months [Figure 1]. No cervical lymphadenopathy present. Patient was a chronic smoker and drinker from 18 years. Provisional diagnosis of malignant tumor of minor salivary gland, mucoepidermoid carcinoma was made. Incisional biopsy was carried out, which revealed squamous cell carcinoma. Computed tomography chest was carried out, which revealed parenchymal lesion in the hilar region of the left lung. Specific investigation like bronchoscopy was carried out and incised specimen was sent for the histopathological examination, which revealed primary squamous cell carcinoma of the lung. Patient was sent to cancer institute for management of the primary tumor; however, patient died after few months due to multiple metastases. Another case of a 61-year-old female patient reported to our department with a  $3 \times 2$  cm non-tender, firm swelling arising from gingiva in the right posterior region of mandible from past 4 months [Figure 2]. No cervical lympadenopathy present. Her medical history was non-contributory. A provisional diagnosis of peripheral giant cell granuloma was made. Incisional biopsy was carried out, which revealed well-differentiated squamous cell carcinoma. Patient was sent for ultrasonogram abdomen and the histopathological examination, which revealed squamous cell carcinoma of uterus. Patient was sent for cancer institute for management of the primary tumor. In 3<sup>rd</sup> case there was primary lung cancer which has metastasized to left posterior mandibular gingiva [Figure 3] and 4<sup>th</sup> case there was primary ovarian cancer which has metastasized to left buccal mucosa [Figure 4].

According to van der Waal et al., most of the patients are aware of primary tumors before the metastatic spread to the oral cavity.<sup>[1]</sup> This letter is unique because a retrograde diagnosis of the primary tumors was made from metastatic oral lesions, which were diagnosed by histopathological examination and other supporting investigations. In males, lung carcinomas metastasis is very common at 31% and usually seen more in the soft palate and gingiva than jaw bones.<sup>[2,3]</sup> In our series, two patients were affected with the primary lung cancer with secondary metastasis to the soft palate [Figure 1] and left posterior mandibular gingiva [Figure 3]. In females, breast cancer metastasis is very common with 24% to oral soft-tissues although female genital organs such as uterus, ovaries, and fallopian tubes are 14.8%.<sup>[4]</sup> In our cases, one patient had primary uterus cancer with the secondary in gingival soft-tissue of right posterior mandible [Figure 2] and the other had primary ovarian cancer with the secondary in left buccal mucosa [Figure 4]. These tumors often mimic hyperplastic lesions or sometimes benign tumors of the oral cavity. Proper clinical examination with patients past medical history will help the surgeon to achieve a diagnosis. Clinical symptoms are lump in soft-tissues of the oral cavity, swelling, pain, and paresthesia in jaw bones. When there is a progression of disease especially in soft-tissues, there might be pain, bleeding, super infection, dysphagia,



Figure 1: A lesion of  $2 \times 2$  cm seen at the junction of hard and soft palate on the left side



Figure 2: A lesion of  $3 \times 2$  cm seen at the posterior region of mandible on right side



Figure 3: A lesion of  $4 \times 3$  cm seen arising from soft-tissue in interdental region of posterior teeth on left side of mandible

interference with mastication. Sometimes it may occur in extraction socket, which is accompanied by soft-tissue mass extruding out from the socket with pain. Tooth extraction can serve as a promoting factor in the metastatic process. Distant metastatic lesions have a poor prognosis especially in cases where the primary is unknown or patient is not aware of it. A systematic clinical examination, patient's medical history, histopathological examination, and other specific investigations have to be carried out to achieve a proper diagnosis. More often retrograde diagnosis is often required when primary is unknown, which poses a challenge to the surgeon for appropriate management.

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Figure 4: A lesion of 2 × 1 cm seen on left buccal mucosa

## **References**

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