Letters to Editor

Osteoblastic metastasis from breast affecting the condyle misinterpreted as temporomandibular joint disorder

Sir,

Despite the low incidence of metastases in jaw bones compared with the rest of the skeleton, metastases are important because of the poor prognosis they carry. Their presence can indicate a yet unknown lesion, a disseminated cancer, or recurrence of the disease.[1] We report a case of a metastatic adenocarcinoma of the breast to the mandible affecting the condyle showing a unique radiologic osteoblastic aspect and symptoms similar to the temporomandibular joint dysfunction.

A 51-year-old white woman presented with a one-year history of trismus and pain in the region of the right temporomandibular joint. The patient was previously treated for temporomandibular joint disorder with an interoclusal custom-made acrylic appliance, without success. On extra-oral examination there was a swelling on the right mandibular body region. There were no palpable lymph nodes in the neck, supraclavicular, or axillary regions. Intraorally, the mucosa was intact; no swelling or other important findings were seen. When asked about her medical history, the patient reported that she had undergone a breast surgery because of a cancer diagnosis. An extensive radio-opaque lesion located in molars region with ill-defined margins was observed in panoramic radiography. A computed tomography scan revealed a mass extending from the anterior region of the mandible to the condyle [Figure 1]. Scintigraphy of the facial skeleton showed a high accumulation of the isotope in the affected area. With a provisional diagnosis of metastatic lesion, an incisional biopsy was performed. Microscopic hematoxylin–eosin-stained sections showed clusters and duct-like arrangement of malignant epithelial cells with large nuclei, containing prominent nucleoli nested at the osseous tissue periphery. Pleomorphism and hyperchromatism were also observed [Figure 2]. The diagnosis was consistent with metastatic adenocarcinoma.

By the time the biopsy was performed, the histological review of the primary lesion was also requested and the diagnosis obtained was invasive ductal carcinoma of the breast. After a careful examination of the patient, another metastatic tumor was found in the spinal column. The patient received palliative irradiation to both sites. Unfortunately, she died after 6 months.

Approximately 50% of condylar metastases begin as a temporomandibular joint (TMJ) syndrome,[2] as happened in the present case. Radiography of mandibular metastasis shows, in general, a radiolucent lesion with irregular and ill-defined margins, although small metastatic lesions may not be detectable in radiographies.[3] On the other hand, some lesions

Figure 1: Computed tomography scan showing presence of a hyperdense lesion on the ramus, with condyle involvement, osseous expansion and destruction

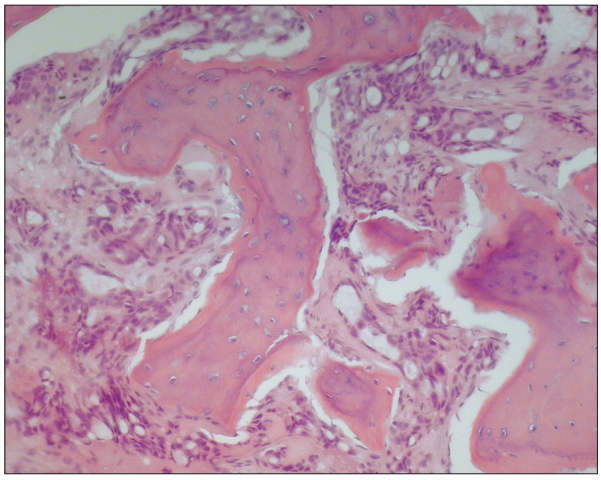

Figure 2: Islands of neoplastic epithelial cells near to the lamellar bone, showing duct-like arrangement (H and E, ×400)

especially prostate neoplasm, are generally associated with radio opaque lesions.[4] The present case presents as an osteoblastic lesion, although it is a breast metastasis.

The definite diagnosis of mandibular metastases should be done by biopsy and microscopic examination of the lesion, comparing it with the histological features of the primary tumor, if known.[5] The prognosis for patients with metastatic tumors in the oral cavity is poor, since most metastatic tumors at this region are preceded or accompanied by multiple metastatic lesions in other sites. In such cases, conservative therapy and palliative treatment are the main management option.[3]

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