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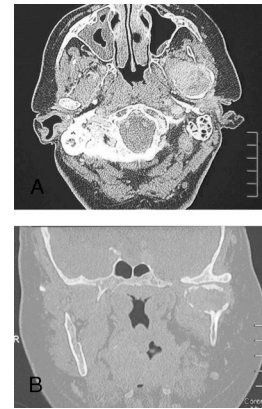


FIGURE 1. A, Axial CT image of the left mandibular condyle. B, Coronal CT image of the left mandibular condyle.

20% to 40% of the patients undergoing nephrectomy due to RCC during follow-up.<sup>2</sup> Metastases are mainly seen in the thyroid, parotid, tonsil, tongue, sinonasal region, mandible, and the scalp on the head and the neck and diagnosed with biopsy.<sup>1,3,4</sup> The main symptoms seen in the metastases of the head and neck region and oral cavity are swellings, pain, bleeding, and loss of tooth. In this study, the patient who has presented with complaints of swelling in the left temporomandibular joint and trismus and determined to have RCC metastasis in the mandibular condyle is presented.

## Metastatic Renal Cell Carcinoma to the Condyle of the Mandible

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Emine Samdanci‡

**Abstract:** A 59-year-old woman who had left nephrectomy because of renal cell carcinoma (RCC) 3 years ago referred with trismus and a mass on her left temporomandibular joint. Computed tomography scan revealed an expanding lytic lesion on the left condyle of the mandible. Incisional biopsy was carried out. Histopathologic diagnosis was metastatic clear cell variant of RCC. Metastasis of RCC to the condyle of the mandible has not been reported yet. In this study, we presented a case of RCC metastasis to the condyle of the mandible.

**Key Words:** Mandible, condyle, renal cell carcinoma, metastasis

Renal cell carcinoma (RCC) is the most frequently encountered malignant tumor of the kidneys. It is usually seen in men between the ages of 30 and 60 years.<sup>1</sup> Whereas 20% to 30% of the patients are diagnosed with metastasis, metastasis is detected in

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Received January 31, 2012.

Accepted for publication February 26, 2012.

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The authors report no conflicts of interest.

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ISSN: 1049-2275

DOI: 10.1097/SCS.0b013e318252f331

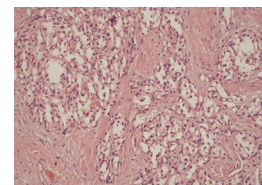
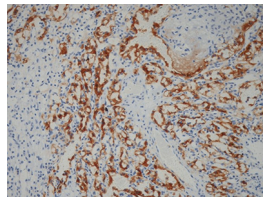


FIGURE 2. Tumor infiltration consisting of oval atypical cells having clear cytoplasm (H&E stain, original magnification  $\times 200$ ).



**FIGURE 3.** Atypical cells stained positively with epithelial membrane antigen and CD10 immunohistochemically (vimentin stain, original magnification  $\times 200$ ).

primary region was observed to be normal. Fraction external radiotherapy with a total dosage of 4600 cGY directed to the lesion region of the patient was administered, and the mass was seen to become stable. Then, interferon treatment was applied. The patient is being monitored.

## DISCUSSION

Renal cell carcinoma accounts for the 3% of all malignancies that are seen in adults.<sup>1,5</sup> It is found to be at rank 3 among the tumors that originate under the clavicle and metastasize into the head and neck region followed by breast and lung tumors.<sup>3,5</sup> Renal cell carcinoma generally develops slowly and forms late metastasis, and 20% to 30% of the patients are diagnosed with metastasis. Although the rate of metastasis of the cases showing lung, liver, and bone metastasis frequently into the head and neck was 15%, head neck metastasis is seen in only 1% of the cases.<sup>1-5</sup> Rare metastasis locations are lined up as thyroid, parotid, tongue, mandible, paranasal sinuses, facial skin, and the scalp.<sup>1,3</sup>

The patient usually exhibits symptoms associated with the region of metastasis. Metastasis to the mandible is seen 4 to 5 times more than metastasis to the maxilla. This difference is associated with the red bone marrow and the quantity of distributed blood. Renal cell carcinoma metastasizes into the head and neck region by 3 ways: these can be explained with lymphatic, hematogenous, and venous route without prevertebral epidural valve (Batson plexus).<sup>1,4</sup>

Lesions metastasizing into the bone are generally asymptomatic but may be symptomatic according to the location. Although bone destruction radiologically similar to primary tumor is detected in many cases, lytic and blastic lesions are rarely seen particularly in breast cancer cases. However, diffused osteoblastic lesions are seen in prostate carcinoma metastases. For the masses that are considered to be metastatic, the regions, the probable primary region and the other regions that may have metastasis, should be scanned, and biopsy should be performed for diagnosis.

In the differential diagnosis of the patient who presents with a mass in the mandible, osteomyelitis, pyogenic granuloma, mandibular cyst, benign tumors, primary malignant tumors, systemic bone diseases infiltrating the bone, and metastatic malignancies should be considered. In patients diagnosed with clear cell metastasis, the primary focus may be present in the thyroid, breast, colon, and some endocrine glands apart from the kidneys.<sup>4</sup>

No lesion was detected in the primary region of our patient, according to examination and radiological imaging methods. Metastasis was found only in the mandibular condyle. Radiotherapy was applied to the patient, who has rejected surgical treatment. Because it was a residual mass, interferon treatment was prescribed.

As a result, primary and metastatic tumors should be considered in the differential diagnosis of the patients presenting with a mandibular condyle mass, and the definite diagnosis should be made by biopsy.

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## Uncommon Foreign Body Reaction Caused by Botulinum Toxin

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**Abstract:** Botulinum toxin is composed of 7 botulinum toxin antigenic subtypes. It is produced by *Clostridium botulinum* bacterial fermentation. Several botulinum toxin subtypes are under investigation for clinical use, but only botulinum toxin type A (BTX-A) is currently approved for cosmetic use because of its clinical safety profile and efficacy. The use of BTX-A in cosmetic facial procedures is a reliable way to enhance aesthetics in the face and is becoming commonplace in oral and maxillofacial surgery. This article reports an uncommon complication after Botox injection in the upper lip, for cosmetic reasons, originating a mass in the anterior region of the maxilla, which leads to failure in orthodontic treatment. Knowledge of the site anatomy, pharmacology, and dose of BTX-A before its use in cosmetic surgery should be strengthened.

**Key Words:** Foreign body reaction, botulinum toxin, gummy smile

**B**otulinum toxin (BTX) is composed of 7 BTX antigenic (A, B, C, D, E, F, and G) subtypes. It is produced by *Clostridium botulinum* bacterial fermentation. Several BTX subtypes are under investigation for clinical use, but only BTX type A (BTX-A) is currently approved for cosmetic use.<sup>1</sup> Botulinum toxin type A consists of a 150-kd dichain polypeptide toxin unit, made up of a

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Received February 1, 2012.

Accepted for publication February 26, 2012.

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The authors report no conflicts of interest.

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ISSN: 1049-2275

DOI: 10.1097/SCS.0b013e318252f3e0