Unusual Solitary Osteoma Coronoid Process And Aesthetic Facial Correction

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Citation

Abstract
Osteoma is a slow-growing, benign and uncommon neoplasm located primarily in the región of the maxillofacial skeleton. An osteoma on the coronoid process is exceedingly rare. Here, we report a case of osteoma occurring in the pterygomandibular space in a 35-year-old woman. Clinical examination reveal facial asymmetry and difficulty in mouth opening, and the regional lymph nodes were non-palpable. CT images revealed well-circumscribed dense, radiopaque masses located coronoid process we present Aesthetic facial correction for this cases.

INTRODUCTION
Osteoma is a benign osteogenic tumor arising from the proliferation of cancellous or compact bone[1]. These bony masses may be composed of soft, spongy bone (cancellous osteomata) or of dense, compact bone (hard or ivory osteomata). Characteristically, they are slow growing, circumscribed, and usually.

Osteomas are benign bone neoplasms, classified as either peripheral or central. Osteomas are found mainly in the craniomaxillofacial bones. Most of the osteomas were located in frontal bone (28.57%), mandible (22.85%), and maxilla (14.28%) [2]. Osteoma of the jaws is quite rare. In instances of mandibular involvement, the most common sites are the angle and lower border of the body. Osteoma of the mandibular coronoid process is rare [3]. Since the first case reported by Lewars [5] in 1959, only two other cases have been described. Another two cases have been documented by Plezi [6] and Wesley et al. [7], however, they relied only on the radiographic appearances and histological confirmation was lacking. The present report describes a further case.

The lesions generally arise in close proximity to areas of muscle attachment, [3] thus, a peripheral osteoma below the coronoid process, as in this case, is extremely uncommon. [8-14]

Occlusal dysfunction and facial asymmetry are the most common findings in condylar osteoma. Multiple osteoma of the jaws are commonly observed in the Gardner síndrome.

CASE REPORT
Examination of a 35-year-old white female patient with a 6-year history of progressive facial asymmetry and limited mouth opening. A left zygomatic body asymmetry was also noticed. This bone was prominent but no mass or swelling was observed. The mobility of the condyles was normal. There was no clicking or crepitation, and no articular pain. Maximum mouth opening was 33 mm.
Figure 1
Fig 1 and 2. Clinical aspect. Note the facial assimetry.

Computed tomography (CT) demonstrated a mass left coronoid process impinging against the posterior aspect of the zygomatic bone.

Figure 2

Figure 3
Fig.3 CT Infratemporal fossa.

The patient underwent surgical intervention with general anesthesia and traqueotomy to perform coronoidectomy by submandibular approach. A coronoid osteotomy was performed as well as a smoothing of the zygoma. After raising the hemicoronal scalp flap, the temporalis was reflected from the anterior temporal fossa. Masseter muscles were released from the zygomatic arch, and the zygomatic arch and coronoid process of the mandible were removed or reflected to gain free access to the infratemporal fossa. The coronoid process was resected at the level of the sigmoid notch so as to remove the entire tumor.

Figure 4
Fig. 4 Surgical specimen.

The left zygomatic body was sectioned and displaced medially to remodeled the zygomatic bone.
The zygomatic arch was then repositioned and stabilized with plate and screws 2.0 mm. after surgery, the patient presented an interincisal opening of 40 mm.

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Figure 5
Fig.5: Piece of zygomatic body osteotomized.

Figure 6
Fig.6: Hemicoronal approach. Stabilization with 2.0 mm plate.

Figure 7
Fig 7 and 8: Immediately postsurgical facial aspect. 8 days postsurgical.
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Figure 8

DISCUSSION

Osteomas are benign, slow-growing tumors that should be monitored and removed surgically when causing symptoms. Osteomas of the jawbones are uncommon. They may arise from the surface of bone as a polypoidal or sessile mass (periosteal osteoma) or may be located within the medullary bone (endosteal osteoma).

Different approaches maybe attempted depending on the size and location of the osteoma.

Although trauma, inflammatory or infectious processes are the causes commonly cited in literature [5, 6, and 10], no etiological factor can be associated with this case. The radiographical findings are usually described as an oval or round mass bound to a large base. A large solitary osteoma may resemble a parosteal osteogenic sarcoma, which in many cases may appear as a well-defined circumscribed mass, lobulated and radiopaque [7]. In this case, differential diagnosis includes osteochondroma.

The treatment of osteoma is surgical excision. Recurrence after surgical procedure is rare and there are no reports of malignant transformation.

References

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