

## Osteosarcoma of the Maxilla and Mandible

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**Background :** Osteosarcoma of the jaw is rare, aggressive malignancy and unusual lesion of all reported osteosarcoma. Osteosarcoma of the maxilla and mandible has physiologic and prognostic differences from that of long bone (upper and lower extremity). We reported the differences between two groups of the osteosarcoma through Yonsei Medical Center experiences.

**Methods :** Ten cases of osteosarcoma of the maxilla and mandible were reviewed retrospectively from 1986 to 2002 in Yonsei Medical Center.

**Results :** Seventy percent of the patients were men. Median age of patients was 40 years (range 17-77). 4 cases of 10 were osteosarcomas in maxilla and 6 cases of 10 were osteosarcoma in the mandible. The median tumor size was 3.5cm (range : 1.5-5). Pathologic types showed osteoblastic (60%), chondroblastic (30%), fibroblastic (10%) type osteosarcoma. Pathologic grade was investigated to be high in 9

cases and low in only one case. The initial complaint was painless swelling (90%), and loss of sensation (10%). All patients received surgical resection. Negative surgical margins were obtained in 70% of operated patients. Adjuvant chemotherapy was performed to 4 patients (40%) and local recurrence occurred in 4 patients (40%). Median survival duration was 69.5 months (95% CI : 47.7-87.5) and median progression free survival duration was 60.5 months (95% CI : 33.8-81.6). Estimated 5-year survival rate was 76%.

**Conclusion :** Despite their same pathologic appearance, osteosarcoma of the jaw bone differs from that of the long bone in its etiology and biologic behavior. Contrary to osteosarcoma of the long bone, chemotherapy did not change the result and prognosis of osteosarcoma of the jaw bone. To control local recurrence, radical resection is important and role of radiotherapy should be reevaluated.