

Abstract:

Currently, it has been established that osteosarcoma (OS) of bone is not a stereotyped disease, and several varieties have been identified by clinical findings, radiographic and histopathologic appearances. Generally, it is the most common primary malignant bone neoplasm that accounts for at least 30% of all primary tumours of bone. In the jaw bones, OS accounts for about 4% of all the primary malignant neoplasms. In the general skeleton, the highest incidence is observed in the second decade of life; the neoplasm is said to be unusual before the age of 5 years and very rare after age 50 years. The aetiology and precise pathogenesis of this disease remain unknown. A diagnosis of clinically and radiologically suspicious OS requires meticulous histologic examination. However, histologic diagnosis may also be difficult since the different varieties of OS may have different morphological patterns in different sample sites. Currently, the two therapeutic modalities used in the primary treatment of OS include radical surgery and cytotoxic chemotherapy. In the general skeleton, the use of surgery alone results in a 90% rate of recurrence of OS. Notably, the advent of adjuvant and neoadjuvant cytotoxic chemotherapy as an adjunct to radical surgery has greatly improved the prognosis of many cases of OS of the jaw bones.