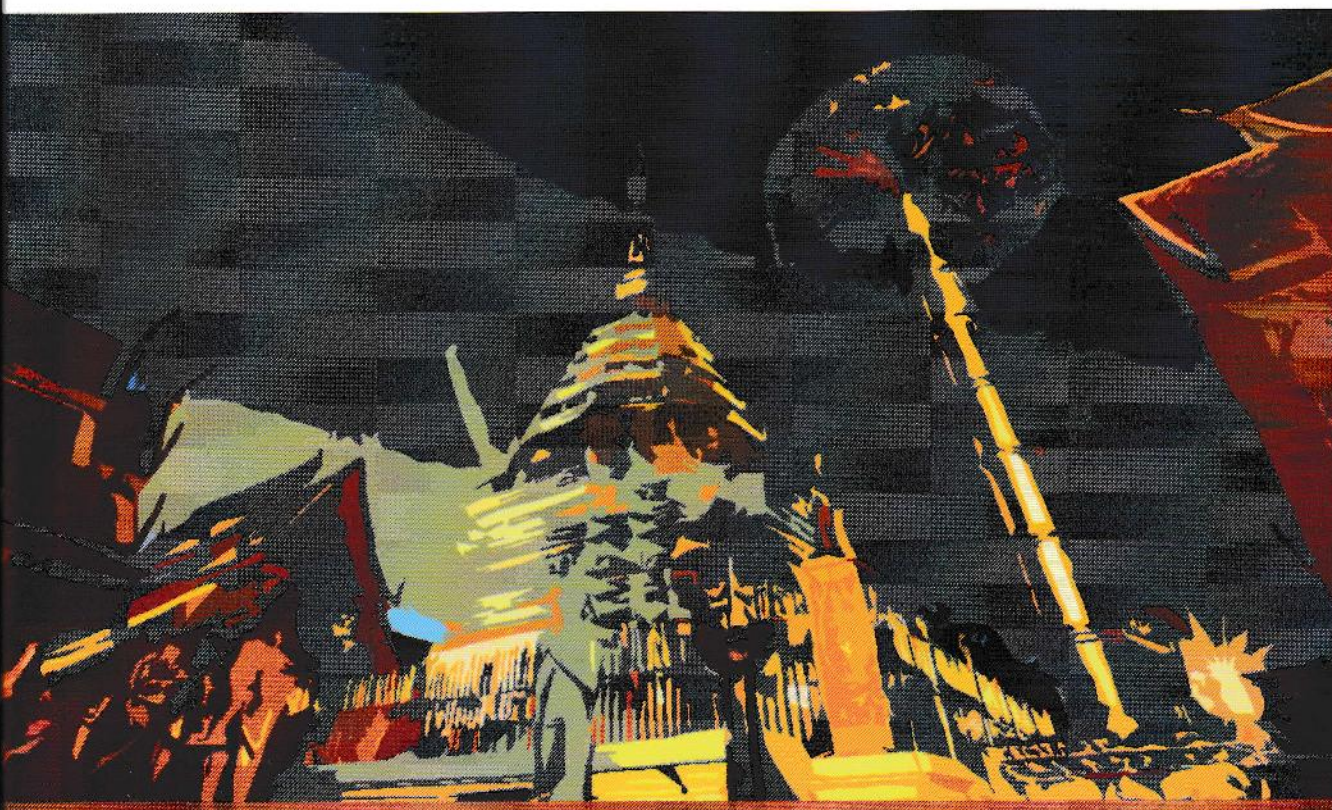

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Osteosarcoma appearance that resembles chronic osteomyelitis by panoramic radiography and 3D CBCT: a case report

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Osteosarcoma is a malignant tumor that attacks hard tissue. Nowadays, the prevalence in the world is about 7%. The impact of the tumor causes patients losing some bones due to resection. Typical radiographic features of osteosarcoma show ill-defined boundary and the periosteal edge appears as sunray depiction or hair on end images. The lesions are often located in the posterior of mandible. However, the radiographic features of osteosarcoma turn out to be difficult to distinguish from chronic osteomyelitis. The aim of this case report is to know the description of osteosarcoma and differentiate it with chronic osteomyelitis by radiograph.

A female 32 years old came to the Hasan Sadikin Hospital with complaint of pain in left mandibular second molars since several months ago, on her 3rd trimester pregnancy. Extra-oral examination showed hard swelling on the left region of the mandible angle. Intra-oral examination showed mucosal swelling on region of tooth 37-38 and painful. Patient was referred to Dental Radiology Instalation of RSGM Padjajaran University to undergo panoramic radiography and 3D CBCT.

Panoramic radiograph showed an irregular radiolucent lesion with ill-defined margin, presence of necrotic tissue and sunray appearance. 3D CBCT showed mixed radiolucent-radiopaque lesion in the left mandibular posterior region, round and irregular in shape with ill-defined margin. There was noticeably sunray image which was periosteal reaction. The size of the lesion was 808.2 mm^2 (29.8 mm in height and 39.7 mm in width). Histopathology test of the patient revealed that the lesion contained necrotic tissue with sequestra that resembled an image of chronic osteomyelitis.

In conclusion, osteosarcoma specifically has sunray appearance that can be seen by either using panoramic radiographs or 3D CBCT.

Keywords: Osteosarcoma, Osteomyelitis, Metastasis lesion