

## Abstract

In diagnosis of osteonecrosis of the facial bone (ONFB) in drug addicts of desomorphine, CT has a great role in early diagnosis of the disease to determine the extent and complication of osteonecrosis before surgery. Imaging finding of ONFB are variable and need to correlate with history and clinical findings.

The modalities used are: panoramic radiograph, CT with MPR and volume rendering, CBCT, MRI, bone scintigraphy. The diagnosis of ONFB made at a late stage of the disease, since patients usually come to the clinician when osteonecrosis is already symptomatic.

## Materials and Methods:

From October 2011 to April 2015 we had performed CT scan and panoramic radiograph of 142 patients with the history of desomorphine addiction (from 6 months to 5 years), aged from 19 years to 45 years, 96 male, 46 female. Maximum of them were referred by maxillofacial surgeon.

## Results

Out of total n142 patients, the osteonecrosis of lower jaw n138(97.2%) , out of which n47(33.1%) had subtotal destruction of left half and n16(11.2%) - right half. osteonecrosis of upper jaw n11(7.7%), osteonecrosis of palatine n2(1.4%), atypical femur fracture n8(5.6%), rib fracture n5(3.5%)

## Conclusions

- CT scan with MPR and volume rendering is far more informative than panoramic radiograph in the early diagnosis of ONFB and determining the extent and complication of ONFB before surgery.
- CT scan is the choice of diagnostic modality in the diagnosis of ONFB in drug addicts.
- The most affected bone is mandible.
- Rib fracture may be also related to desomorphine intake.
- The true incidence of ONFB has yet to be determined.