



MNR DENTAL COLLEGE AND HOSPITAL

“NAAC ACCREDITED”

(Recognized by MH&FW, Govt. of India & Affiliated to KNR University of Health Sciences)

MNR Nagar, Narsapur Road, Fasalwadi, Sangareddy 502294

Institutional Distinctiveness

2016-2017

MNR Dental College is first in the state to have Cone-beam computed tomography (CBCT) as advanced imaging modality. It has high clinical applications in the field of dentistry. MNR Institute is first in the Telangana state to have CBCT as a three-dimensional radiographic imaging method in college. Even in the sangareddy district, MNR Dental college was first to have CBCT among all corporate clinics providing advanced imaging facility to all the nearby localities.

Radiographic imaging method is the basic confirmative diagnostic method. For accurate diagnosis three-dimensional (3D) imaging of the hard tissues is required. This can be achieved by CBCT (Cone beam Computed Tomography). It is an imaging modality, which can provide a three-Dimensional representation of the maxillofacial structures with minimal distortion and reduced radiation hazards. CBCT is capable of providing sub-millimetre resolution (2 line pair/mm) images of higher diagnostic quality, with shorter scanning times (~60 s). Radiation exposure dose from CBCT is 10 times less than from conventional CT scans during maxillofacial exposure (68 μ Sv compared with 600 μ Sv of conventional CT)1 and also it has got great dimensional accuracy (only about 2% magnification).

MNR Institute has Cone-beam computed tomography (CBCT) for accurate, three-dimensional (3D) imaging of hard tissue structures. CBCT of CRANEX 3D X SOREDEX was bought in the year 2016. High end equipment policy was maintained providing the guidelines for the personnel on usage of CBCT. Demo to the students on how

to use CBCT was given. Regular classes on how to take CBCT with clinical tips and how to read and interpret CBCT are conducted for accurate diagnosis.

CBCT has gained increased acceptance as a 3D imaging modality offering an alternative to CT especially in the maxillofacial area. It has wide applications in the field of dentistry for diagnosing pathologies, visualizing internal anatomies three-dimensionally and for accurate treatment planning. CBCT technology is increasingly accessible in dental practice. It hugely expands the fields for diagnosis and treatment possibilities for the patients.



CBCT

