# UTILITY OF DIFITAL VOLUME TOMOGRAPHY IN MAXILLO-FACIAL RADIOLOGY

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#### Abstract:

Imaging is an important diagnostic adjunct to the clinical assessment of the dental patient. The currently used imaging modalities include intra-oral radiographs, panoramic radiographs, magnetic resonance imaging (MRI), computed tomography(CT) including cone-beam (CB) CT, ultrasonography(US), and nuclear medicine including positron

Emission tomography (PET). The introduction of panoramic radiography in the 1960's and its widespread adoption throughout the 1970's and 80's heralded major progress in dentalradiology - providing clinicians with a singlecomprehensive image of both jaws and maxillofacialstructures. However both intraoral and extraoralprocedures, used individually or in combination, suffer from the same inherent limitations of all planartwo dimensional (2D) projections - magnification, distortion, superimposition and misrepresentation of structures. The cone-beam technique (CBCT or DVT) is themost recent advance in computer-assisted tomography. Initial studies using phantomshave confirmed a geometric accuracy of upto tenthsof millimeters. Advanced cross-sectional imaging techniques are used in dento-maxillofacial imaging to solve complex diagnosticand treatment-planning problems, such as those encountered in craniofacial fractures, endosseous dental-implantplanning, and orthodontics, among others. With the advent of Cone Beam Computed Tomography (CBCT)technology, cross-sectional imaging that had previously been outsourced to medical CT scanners has begun to takeplace in dental offices.

## Biography:

Dr. Anuraag B. Choudhary is currently working as an Associate Professor of Oral Medicine & Radiology Department at the VidyaShikshanPrasarakMandal's Dental College& Hospital, Nagpur, Maharashtra. He is also a consultant Maxillo-facial Radiologist at Phoenix Imaging CBCT centreNagpur. He has done his BDS and MDS from SharadPawar Dental College Wardha, Maharashtra. In his academics, he won prize for best poster in National



IAOMR Conference, Nellore in 2008. He also won first prize in paper presentation in National IAOMR PG Convention, Mathura, U.P. in 2009 and also in IDA Nagpur 2010. He has presented scientific papers on CBCT in several National specialty conferences and has been accredited with numerous publications in various indexed journals on the same. He is a Co-Author in Text book of Essential's of Pediatric Oral Pathology. He is presently a reviewer of various indexed journals. Recently he has been invited as a Guest Speaker in IDA Baitul MP, SDK Dental College, Nagpur, IDA Yeotmal branch, State IDA Manipur, Imphal, SharadPawar Dental College Wardha and various national & International conferences. He also delivers lectures on various topics like TMJ disorders, Oro-Facial Pain as well as on Muco-cutaneous lesions.

### Publication of speakers:

- 1. Anurag ChoudharyUtility of Digital VolumeTomography in maxillofacialTrauma. Journal Oral andMaxillofacialSurgery, 2011;69: e135-e140
- 2. UTILITY OF CONE BEAM CTIN MAXIL-LO-FACIALRADIOLOGYInt J Dent CaseReports 2013;3(1): 134-145 ©IJDCR 2013. Allrights reserved www.ijdcr.com
- 3. Pleomorphic Adenoma of Palate-A Case Report with CT and CBCT Features. IOSR Journal of Dental and Medical Sciences (IOSR-JDMS) e-ISSN: 2279-0853, p-ISSN:2279-0861. Volume 13, Issue 8 Ver. I(Aug. 2014), PP. 83-89

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