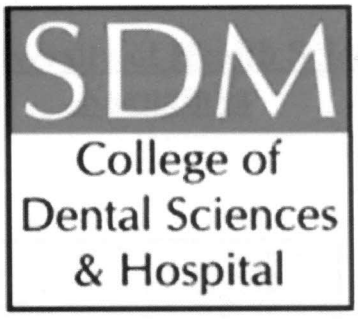

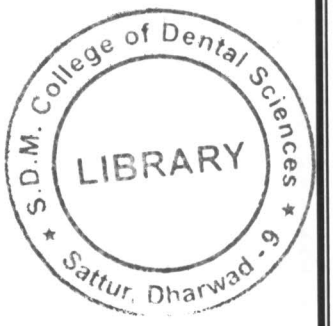

"ASSESSEMENT OF CONDYLAR CHANGES IN PATIENTS WITH TEMPEROMANDIBULAR JOINT PAIN USING DIGITAL VOLUMETRIC TOMOGRAPHY"

by

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ABSTRACT

OBJECTIVE: To evaluate the efficiency of DVT in comparison with OPG in assessment of bony condylar changes in patients of TMJ pain.

METHODS: 100 temporomandibular joints of 62 patients with the complaint of temporomandibular joint pain were included in study. DVT and OPG radiographs were taken for all the 100 joints. Three observers interpreted the DVT and OPG radiographs for bony changes separately for two times with an interval of one week. The bony changes seen in the condyle were given coding from 0-6. (0- Normal,1- Erosion, 2- Flattening, 3- Osteophyte, 4- Sclerosis, 5- Resorption, 6- Other changes). Interobserver and intraobserver variability was assessed with one way ANOVA statistics. Z test was used to see the significant difference between OPG and DVT.

RESULTS: In the present study the Inter- examiner reliability for OPG and DVT was 0.903 and 0.978 respectively. Intra- examiner reliability for OPG and DVT was 0.908 and 0.980 respectively. The most common condylar bony change seen in OPG and DVT was erosion followed by flattening and osteophyte. There was significant difference between OPG and DVT in detecting erosion and osteophytes. The other changes observed in our study were Ely's cyst, pointed condyle and bifid condyle. All the bony changes were more commonly seen in females than males.

CONCLUSION: DVT provides more valid and accurate information on condylar bony changes. The DVT has an added advantage of lesser radiation exposure to the patient, cost effectiveness and could be easily accessible in a dental hospital.

KEY WORDS: Condylar bony changes, TMJ pain, OPG, DVT.