

Mansour, S, Khan, EA. Assessment of the Relationship of Disc Position to Disc Configuration in TMJ Internal Derangement by Using Magnetic Resonance Imaging. 17th ICDMFR, June 28-July 2, 2009. Programme & Abstract book, p 24. (Abstract).

Abstract

Introduction: Disc displacement with reduction (ADDR) or without reduction (ADD) is considered the most frequent abnormality in patients with pain and dysfunction of the TMJ. Disc displacement is infrequently associated with deformity which has been recognized as an important feature of internal derangement of the TMJ and as a suspect in functional impediment. In fact, shape of the disc is one of the determinants of type of surgical procedure selected. The relationship between disc position and configuration has not been fully studied.

Objectives: To assess the relationship between different types of disc position and disc configurations in TMJ with internal derangement.

Materials and methods: Twenty five patients with clinical diagnosis of internal derangement were examined using T1W sagittal MRI. Displacement and deformity were graded into 6 and 5 classes according to Nebbe and Murakami et al respectively. Relationships between categorical variables were assessed by chi-square and Fisher's exact tests.

Results: The most prevalent disc deformity in cases of ADDR was lengthening followed by folding of the disc (28.6%, 23.8%). While the biconcave deformity followed by folding of the disc were the most prevalent in ADD (41.7%, 33.3%). Full disc displacement showed the highest percentage of deformity. However, no statistically significant difference was found between grades of disc displacement and disc configuration.

Conclusions and discussion: This study shows no association between disc position and disc configuration in patients with TMJ internal derangement. However, larger sample size and wider range of patients' profile (age and duration of disease) may show otherwise.

Introducing Cone-Beam Computed Tomography (CBCT) imaging in Dental Practice Al-Sadhan, Ra'ed, Khan, Emad. Saudi Dental Journal 2008;18(SI)-Abstr.056.

Presentation at the 2nd KAU & the 19th SDS Conference for Dental Technology & Research and the International Association for Dental Research (IADR) Saudi Arabian Section & General Assembly Meeting.

Abstract

Cone-Beam Computed Tomography (CBCT) promises to have a great impact on dental procedures. Studies and research in this field are accelerating faster than any previous image modality in our profession. This presentation will cover:

- Basics and Imaging Technique.
- Multiplaner Reconstruction.
- Three dimensional reconstruction.
- Volume Rendering.
- Differences between CBCT and medical multi-detector CT imaging.
- Advantages and Applications.
- Computer assisted treatment planning and surgical procedure.
- Simulation.
- Examples of clinical cases where Cone Beam CT Imaging displayed superior data for the referring dentist's clinical decision.