

***THE RELATIONSHIP BETWEEN THE  
DEGREE OF TEMPOROMANDIBULAR  
JOINT DISK DISPLACEMENT AND THE  
ASSOCIATED PAINFUL CLICKING***

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# ABSTRACT

**Background:** Temporomandibular disk position has considered as a main source of pain in clicking temporomandibular joint with disk derangement.

**Objective:** This study has carried out to analyze the difference in position of the displaced disks between the painless clicking joints and the painful clicking joints both compared with controls as standard reference.

**Method:** Fifty-four joints from twenty-seven patients suffering from temporomandibular joint internal derangement were evaluated and measured by Magnetic Resonance Imaging as being the best non-invasive imaging technique in determination of temporomandibular joint disk position by both subjective and metric methods. The mean age was 31.3 years, ranging between (13 – 65) years, with male to female ratio about 1: 6. Other eighteen joints from nine clinically normal volunteers were examined as controls. All were pre-evaluated clinically.

**Results:** The results indicate that disk / fossa relationship was not significant in determination of disk position except for patients with subluxation, while the disk / condyle relationship was significantly dependable, and showed that normal disk angulations in Iraqi controls were between (–10.2 to +16.8) degrees with normal range of motion about 27 degrees. In addition, the results reveal that no significant position was responsible for pain production but as soon as the displaced disk reaches the acceptable relation with condyle by which can do its required function.

**Conclusion:** The displaced disk was responsible for click production, while the pain was the responsibility of functional disk/ condylar relationship, which if disturbed, the concomitant painful inflammatory process will progress.