

Correlation between Clinical Features & MRI Findings in Patients with Internal Derangement of Temporomandibular Joint

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In

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By

Shahrazaad Sami Saeed

B. D. S.

Supervisor

Dr. Lamia Al- Nakib

Asst. Prof.

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ABSTRACT

The objective of this study is to make correlation analysis between clinical signs of temporomandibular internal derangement and findings of magnetic resonance imaging for diagnosis of disk displacement with or without reduction and disk configuration.

Eighteen patients (34 joints) were examined according to Helkimo index which include impaired TMJ function, impaired range of movement, TMJ tenderness, muscle tenderness & pain during mandibular movement.

The results showed significant correlation between Helkimo index and MRI findings, in that as the severity of index increased, there was an increase in progression of disk displacement, and when the index was mild 88.9% of the joints were with normal disk position, the posterior band of disk was on 12 o'clock position on top of condyle and about 11.1% had disk displacement with reduction, the disk return to normal position relative to condyle in open mouth position and no patient had disk displacement without reduction.

When the index became moderate, 55.6% of joints were normal, 44.4% had disk displacement with reduction & no patient had disk displacement without reduction.

As the index became severe , all Joints had displaced disk, 37.5% disk displacement with reduction and 62.5% had disk displacement without reduction.

The clearest value received from this study that the presence of clicking, deviation & pain together may point out to joint with disk displacement with reduction, while presence of crepitation, locking, muscle tenderness, joint tenderness, impaired range of movement, point out to disk displacement without reduction.