

**Purpose**To determine the correlation between dynamic Magnetic Resonance Imaging (MRI) and arthroscopy findings in internal derangement of the temporo-mandibular joint (TMJ). **Material and methods**This study was conducted on 25 patients (of 28 TMJs), 18 females and 7 males their age ranging from 20 to 42 years (mean 31 years). All patients were submitted to MRI examination of the TMJ. All of these patients underwent arthroscopy for diagnosis and treatment and results were compared with dynamic MRI findings. **Results**Concerning disc position, MR examination revealed 24 TMJs out of 28 (85.7%) with anteriorly displaced discs, while 4 TMJs (15.3%) showed normal disc position. When type of displacement was considered, MRI revealed 8 TMJs (28.7%) with anterior disc displacement with reduction (ADDWR), while 16 TMJs (57.1%) with anterior disc displacement without reduction (ADDWOR). While arthroscopy revealed 6 TMJs out of 28 (21.4%) with ADDWR, 14 TMJs (50%) showed ADDWOR and 8 TMJs (28.6%) with normal disc position. MRI assessment of disc mobility revealed 12 out of 28 TMJs (42.8%) with limited asynchronous movements, while 3 TMJs (10.7%) with stuck disc, and 13 TMJs (46.4%) with normal mobility. While arthroscopy revealed 11 out of 28 TMJs (39.2%) with limited disc mobility, 1 TMJs (3.5%) with stuck disc, and 16 TMJs (57.1%) with normal mobility. The results of this study showed no significant statistical difference between arthroscopy and MRI in diagnosing disc position and disc mobility. **Conclusions** Both arthroscopy and dynamic MRI are statistically correlated with each other in detecting TMJ internal derangement. Nevertheless, reviewing the results highlighted the advantages of MRI augmented by dynamic protocol over arthroscopy in diagnosing disc position and mobility and hence, we recommend using MRI as a first line diagnostic modality when internal derangement is suspected.

(PDF) *The accuracy of dynamic Magnetic Resonance Imaging in evaluation of internal derangement of the temporomandibular joint; Comparison with arthroscopic findings*. Available from: <https://www.researchgate.net/publication/257222536> The accuracy of dynamic Magnetic Resonance Imaging in evaluation of internal derangement of the temporo mandibular joint Comparison with arthroscopic findings [accessed Oct 22 2018].