MAGNETIC RESONANCE (MR) EVALUATION AFTER TEMPOROMANDIBULAR JOINT DISKECTOMY

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ABSTRACT

Objective: The present study was conducted to investigate the value of magnetic resonance imaging (MRI) in the assessment of the post-surgical TMD pain after diskectomy without replacement.

Material and Method: Twenty patients (14 females and 6 males) with an average age of 29.4 years with TMDs who needed diskectomy were operated upon and were assessed clinically and by MRI at the beginning and 12 months after surgery.

Results: Clinically, 16 out the twenty patients showed significant improvement in their clinical signs and symptoms ($p < 0.001$) at one year postoperatively. Maximal interincisal opening (MIO) showed significant improvement at one year postoperatively. Sixteen out of twenty patients were considered successful, and of the four unsuccessful patients, 2 patients showed suboptimal oral opening and pain relief, one patient showed suboptimal oral opening and one patient showed suboptimal pain relief. MRI showed that in the successfully treated joints, there was no bone-to-bone contact and the joints showed a high signal image from the articulating surface of the joints.

Conclusion: The present study suggests that MR imaging could be a valuable tool for evaluation of patients after TMJ diskectomy.

INTRODUCTION AND REVIEW OF LITERATURE

Diskectomy of the temporomandibular joint (T.M.J.) is the most commonly used surgical method for the treatment of internal derangement when pain is not alleviated by non-surgical treatment methods[1]. Most surgeons seem to agree that the majority of patients with temporomandibular disorders (T.M.D.) can and should be treated conservatively before surgical intervention, however, the duration before surgical intervention differs among various clinicians[2-4].

Internal derangement related to displaced disks has been treated with different surgical modalities, diskectomy without replacement has been in use for decades, but only recently has its use increased in frequency and superseded that of diskectomy with replacement[2,5-9].

The success rate for diskectomy has been reported to be between 67% and 85%[10-12]. This relatively high success rate has also been documented in long term follow-up studies[5,3,14]. In spite of the reported high success rates, the method has also been criticized[2,15]. It has been claimed that pain relief is more a result of severing of sensory nerves

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