

Treatment of Closed Lock of the TMJ

A report on a paper by Schiffman, E.L. et al., Journal of Dental Research 86: 58-63, 2007

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Although it is not the most common of TMJ problems, closed lock is very frightening for those who have it. In its most acute stage, the mouth is almost impossible to open because of both a physical block by a displaced disk and great pain. Because of this, surgery has long been the treatment of choice, since it was assumed that this was the only way to get the disk back in place. However, it was also known that symptoms can improve with simple symptom management, or a combination of symptom management and physical therapy. This prompted a group at the University of Minnesota to carry out a randomized clinical trial of four treatments for Closed Lock: (Medical management); Rehabilitation; Arthroscopy; and Arthroplasty. Medical management (MM) was pharmacological treatment of pain and inflammation with anti-inflammatory agents and analgesics, while Rehabilitation was a combination of MM with dental splints, physical therapy and psychology. Arthroscopy means inserting a small tube into the joint so that the surgeon can see inside, wash out the joint (lavage) and remove small pieces of tissue. In Arthroplasty, the joint is cut open so that the surgeon can remove larger pieces of tissue, which could be the whole TMJ disc and make repairs.

The scientists used two measures to quantify signs and symptoms, the Craniomandibular Index and Symptom Severity Index. The first measures movement, joint noises, tenderness of muscles and joints, while the second measures the pain- its intensity, tolerability, frequency and duration. They took measurements before treatment began, then at increasing intervals from the end of treatment to 5 years after treatment.

The main finding was that all four groups were much better 3 months after treatment, and that small improvements occurred out to 5 years. However, there was no difference between the four groups at any time during the study, which surprised a lot of people.

The authors concluded that, "Primary treatment for patients with closed lock should consist of medical management or rehabilitation". However, it is hard for me to understand why they recommended rehabilitation because MM is simpler, takes less time and costs much less. So there is really no justification in this study for anything more than managing inflammation and pain, which can be done by either a dentist or a physician.