Often, we are asked by our patients as to what the future has in store for them. Particularly, those who we have treated with orthotics for Phase I treatment. Many of these patients look for long term solutions for their bite discrepancy since wearing their orthotics forever is not the most pleasant option for them. This is where orthodontics comes into play. Phase one establishes the ideal bite with the condyles in the proper position for function. Most orthotics are made from some sort of acrylic and wears away over time since patients have to wear it during meals.

Orthodontics makes for a wonderful option for long-term stabilization of the bite after orthotic treatment has established it. This has been very well received by our patients.

If you have any patients that would benefit from either phase one or phase two treatment, please suggest that they come to our practice for further evaluation. We appreciate all of your referrals.

Objectives
To assess the effects of mandibular repositioning-stabilization splints concluded by occlusal orthodontic therapy in patients affected with TMJ internal derangement (with and without disc reduction), all suffering from severe pain, with a follow-up of 18 years from treatment.

Subjects and Methods
A group of 68 patients, (58 women and 10 men, average age 22, range 14 to 55 years) was considered.

The evaluated parameters were:

a) Mandibular dynamics
b) Subjective symptoms (intensity of facial pain perceived through VAS)
c) Articular noises
d) Condylar position via radiography.

These were determined before treatment, immediately after completion and 5, 10 and 18 years after treatment.

Results
At the end of treatment there was a significant improvement of the mandibular function (p < 0.001), a significant reduction of spontaneous pain (8 patients vs all patients, p < 0.001) and disappearance of joint noises in all cases. In the course of the 18-year period subsequent to the treatment only minor relapse of symptoms/signs was noted; spontaneous pain was present in 13 patients, with a pain intensity at TMJ level significantly lower than at baseline (p < 0.001). Clicking was present systematically in 3 patients and only occasionally in 19 patients (p < 0.001). A relapse of condylar dislocation was found only in 11 cases at the X-ray examination.

Conclusions
It is suggested that a permanent occlusal orthodontic treatment be used in subjects suffering from disc displacement with pain, particularly if patients need that for malocclusion and if orthopaedic joint instability is present after a change in the mandibular positioning with a stabilization splint.
Orthodontics for treating temporomandibular joint (TMJ) disorders.

Luther F: Department of Orthodontics, Division of Child Dental Health, Leeds Dental Institute, Clarendon Way Leeds, UK, LS2 SLU, Layton S, McDonald F. The Cochrane Database of Systematic Reviews, July 7, 2010

Temporomandibular disorders (TMD) relate to discomfort of the temporomandibular joint (TMJ). The disorder is multifactorial with a degree of psychogenic influence varying throughout an individual’s life with phases of symptoms affecting the quality of life. In an attempt to treat this complex group of disorders many treatment modalities have been identified some of which are also considered in other Cochrane reviews. The disorder also has a normal cycle of events appearing to spontaneously improve without treatment.

Objectives
To establish the effectiveness of orthodontic intervention in reducing symptoms in patients with TMD and to establish if active orthodontic intervention leads to TMD.

Randomized controlled trials including quasi-randomized trials assessing orthodontic treatment for TMD were included. Studies with adults aged equal to or above 18 yrs. old with clinically diagnosed TMD were included. There were no age restrictions for prevention trials provided the follow-up period extended into adulthood. The inclusion criteria required reports to state their diagnostic criteria for TMD at the start of treatment and for participants to exhibit two or more of the signs and/or symptoms. The treatment group included treatment with appliances that could induce stable orthodontic tooth movement. Patients receiving splints for 8 to 12 weeks and studies involving surgical intervention were excluded.

The outcomes were how well were the symptoms reduced, adverse effects on oral health and quality of life.

The searches identified 284 records from all databases. Initial screening of the abstracts and titles by all review authors identified 55 articles that related to orthodontic treatment and TMD. Full articles were then retrieved and of these articles only 4 demonstrated any data that might be of value with respect to TMD and orthodontics. After further analysis of the full texts of the four studies identified, none of the retrieved studies met the inclusion criteria and all were excluded from this review. In conclusion, there are insufficient research data on which to base our clinical practice on the relationship of active orthodontic intervention and TMD. There is an urgent need for high quality randomized controlled trials in this area of orthodontic practice. When considering consent for patients it is essential to reflect the seemingly random development/alleviation of TMD signs and symptoms.

Orthodontic treatment for the TMJ patient following splint therapy to stabilize a displaced disk(s): a systematic approach.

Part 1. TMJ Orthodontic Diagnosis.


Orthodontic treatment for a patient who has had a displaced disk or disks and has been stabilized by anterior repositioning splint therapy presents the dentist with a difficult orthodontic problem. Frequently, there is a posterior open bite present, with the anterior teeth only occluding in the stabilized TMJ position upon removal of the splint. The current articles (Part 1 of 2 presented here) will present an organized TMJ/orthodontic diagnosis (part 1) and orthodontic treatment method to properly treat these patients to a consistent stabilized occlusion compatible with the TMJ splint stabilized position.

Orthodontic treatment for the TMJ patient following splint therapy to stabilize a displaced disk(s): a systemized approach.

Part 2.


Orthodontic treatment for a patient who has had a displaced disk or disks and has been stabilized by anterior repositioning splint therapy presents the dentist with a difficult orthodontic problem. Frequently, there is a posterior open bite present, with the anterior teeth only occluding in the stabilized TMJ position upon removal of the splint. The current articles (Part 2 of 2 presented here) will present an organized TMJ/orthodontic diagnosis (Part 1, J Craniomandibular Practice 2010:28 (3): 193-199) and orthodontic treatment method (Part 2) to properly treat these patients to a consistent stabilized occlusion compatible with the TMJ splint stabilized position.