

# **GENERAL DENTISTS ARE THE KEY TO THE DIAGNOSIS AND TREATMENT OF TM DYSFUNCTION**

Brock Rondeau, D.D.S. I.B.O., D.A.B.C.P., D-A.C.S.D.D., D.A.B.D.S.M., D.A.B.C.D.S.M.

The American Dental Association estimates that 34% of the adult population have some signs and symptoms of temporomandibular dysfunction. The ADA further stated that dentists have the prime responsibility in the diagnosis and treatment of TM dysfunction to the limit of their ability. Following that statement it is difficult to comprehend why the ADA does not insist that this important treatment is not part of the curriculum of the majority of the dental schools in the U.S.A. in 2020. If it is not taught in dental schools or specialty programs in most universities in the U.S. and Canada how can dentists have enough confidence to either diagnose or treat patients with TM dysfunction.

The dental schools have done an excellent job of teaching dentists how to diagnose and treat conditions of the teeth and gums but totally ignored the temporomandibular joint in most cases. TM dysfunction is a serious problem for many patients. Symptoms include headaches, neck pain or stiffness, ear pain, congestion or ringing in the ears, dizziness and fainting, difficulty swallowing, pain behind the eyes, numbness in the hands, shoulder, and back pain. Since many of these symptoms may be related to the TMJ it seems that we have an ethical responsibility to try and help these patients. We have to ask ourselves a question; Did we go into dentistry just to help patients with their teeth and gums or are we interested in helping the patient achieve better overall health? I am hopeful that you will want to expand your knowledge in this area so you can diagnose and treat some of your adult patients who have TM dysfunction. Children and teenagers also suffer from TM dysfunction but these are mainly treated with functional appliances.

The signs of TM dysfunction includes clicking, popping or grinding noises when opening or closing the mouth, limited mouth opening can occur with chronic closed lock (lock jaw). If the jaw is in the incorrect position this can cause the disc to be dislocated, only a dentist can recapture the dislocated disc utilizing an intra-oral splint or orthotic.

The medical profession are also not taught about the temporomandibular joint in most medical schools in the U.S. and Canada. In fairness to them, they do learn about all the other joints in the body. I strongly believe that the dental profession is responsible to learn how to diagnose and treat patients with TMJ problems. Only a physician can fix a dislocated shoulder and only a dentist with proper training can fix a dislocated jaw. It begs repeating that if there is noise in the TMJ then the jaw is dislocated.

The medical profession mainly treats the symptoms of TM dysfunction with muscle relaxants, pain medications, anti-inflammatories and even anti-depressants. There is no question that some of the patients with TMD are depressed due to the constant headaches, neck aches, etc., prior to treatment. However, it has been my experience that once the jaw has been stabilized successfully and the symptoms resolved, the patients have no more

need for medications. Medical doctors treat mainly the symptoms but the dental profession has the ability to resolve the cause of the TM dysfunction.

The key to any successful treatment of a patient suffering from TM dysfunction is making the proper diagnosis. The clinician must first determine whether the patient is suffering from intra-capsular problems or extra-capsular problems, or both.

Extra-capsular problems are basically muscle related problems outside the TMJ. Patients frequently suffer from parafunctional habits such as bruxing and clenching at night. This is evidenced by the muscles of mastication such as the temporalis and masseter muscles being extremely sore especially in the morning when the patient wakes up. Very important to ask the patient when their headaches are the worst. If they occur in the morning then this is very indicative of an extra-capsular problem which requires a night appliance known as an anterior deprogrammer, to prevent the bruxing and clenching.

To confirm the diagnosis it is important for clinicians to palpate the head and neck muscles to determine if the muscles are sore due to excessive contractions. Sore muscles indicate a TMJ problem.

We also must check for evidence of bruxing which includes excessive attrition, abfractions, flattened cusps on cuspids and bicuspid, irregular or shortened incisal edges.

The nighttime anterior deprogrammer has an anterior biteplate with the only contact being on the lower central and lateral incisors during swallowing. This prevents the contact of all the posterior teeth which prevents the temporalis and masseter muscles from contracting excessively. This eliminates the habits such as clenching and grinding as well as the resultant headaches.

I have named my anterior deprogrammer Ferrari 2. It is important to keep the lower jaw and tongue from falling back at night in order to open the airway to help prevent snoring and sleep apnea. The Ferrari 2 has an anterior incisal ramp which helps keep the mandible forward at night. This is extremely effective if the patient is a nasal breather.



**FARRARI 2 ANTERIOR  
DEPROGRAMMER APPLIANCE**

The standard nightguard as taught in most dental schools worldwide also known as flat plane splints are not effective in preventing either clenching or bruxing since patients will continue to clench and brux on the posterior acrylic pads of the nightguards rather than eliminate the parafunctional habits.



### **FLAT PLANE SPLINT**

#### **A) EXTERNAL DERANGEMENTS**

The upper nightguard (upper flat plane splint) is the most popular appliance used worldwide to treat TM dysfunction.<sup>1</sup> Research has shown that the upper nightguard does not prevent bruxism and actually makes it worse.<sup>2</sup> It is important that the posterior teeth do not touch the splint when the patient swallows in order to prevent bruxism.

#### **B) INTERNAL DERANGEMENTS (CLICKING JAWS)**

When a patient wears a flat plane standard nightguard, the lower jaw goes posteriorly particular at night if the patient is supine. Patients with internal derangements already have posteriorly positioned mandibles with dislocated anteriorly displaced discs. Therefore the flat plane nightguards do not solve the problem. Research has shown that flat plane nightguards do not recapture the disc.<sup>3</sup> Even worse than not solving the problem, patients in Stage 2 (Internal Derangement), clicking jaws, intermittent locking and pain can often end up with Stage 3 (Internal Derangement) with Chronic Close Lock (Lock Jaw).

It is extremely important for dentists not to fabricate a flat plane standard nightguard for patients who present with a clicking jaw. I have patients referred to me almost daily that have been prescribed nightguards that have caused them to have worse symptoms and in some cases, as I mentioned above, have had their jaws lock (Chronic Closed Lock). This is an extremely serious problem for the

treating TMD dentist to treat and the patient is usually in a great deal of discomfort. I would urge all dentist who have a patient with lock jaw to refer the patient to someone who can unlock them manually within 6 months. After 6 months it is extremely difficult to unlock these patients and they may have to consider TMJ surgery which has a low rate of success. The diagnosis for lock jaw is the patient has limited opening 10-26 mm interincisally, jaw deviates to the side of the TMJ that is locked and is often quite painful.

**C) AGGREGATION OF RESPIRATORY DISTURBANCES BY THE USE OF FLAT PLANE OCCLUSAL SPLINTS (NIGHTGUARDS) IN APNEIC PATIENTS**

The problem is that the upper flat plane nightguard causes the lower jaw and tongue to go back which obstructs the airway at night. The American College of Prosthodontists Position Statement, June 3, 2016, stated that increasing the occlusal vertical dimension with an upper nightguard without mandibular protrusion has been found to aggravate sleep apnea in some patients. This statement was verified by an article entitled, "*Aggravation of Respiratory Disturbances by the use of Occlusal Splints in Apneic Patients*"<sup>4</sup>

Dr. Gilles Lavigne, former Dean of the University of Montreal, is recognized as a world authority on bruxism and sleep apnea.

The study indicated that the AHI (apnea hypopnea index) was increased more than 50% in 5 out of 10 patients. The Apnea Hypopnea Index is basically how many times a patient stops breathing at night for 10 seconds or more. It is the gold standard for diagnosing obstructive sleep apnea when a patient undergoes a sleep study, diagnosed by a sleep specialist.

Severe sleep apnea is a very serious health problem which can cause high blood pressure, acid reflux, heart attacks, strokes, type 2 diabetes, increased risk of motor vehicle accidents, memory loss, greater chance of cancer, dementia, and Alzheimer's. The study also revealed that these flat plane occlusal nightguards also caused a 40% increase in snoring. Snoring is an extremely serious social problem affecting 50% of the population over age 50. Anything that makes snoring worse is certainly a serious concern for the bed partner.

Obstructive sleep apnea affects approximately 25% of the adult population and this serious medical disorder is undiagnosed 85% of the time. Research has shown that patients with severe sleep apnea have a reduced life span of approximately 10 years. Therefore, we must be careful not to prescribe an upper flat plane occlusal nightguard for patients who snore, or you suspect may have, or have been previously diagnosed with sleep apnea.

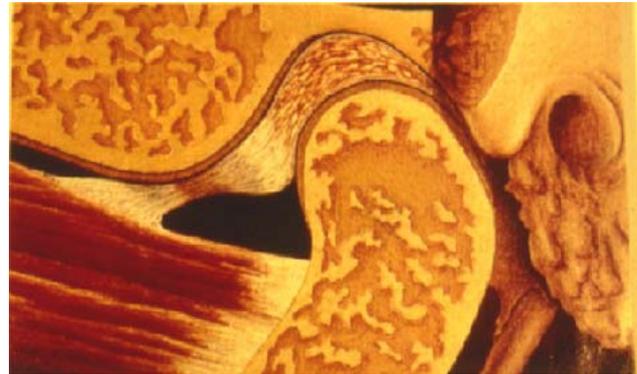
Inter-capsular problems means there is a structural problem within the joint itself. The most common problem occurs when the condyle is positioned too far back in the glenoid fossa which has caused a dislocation of the disc anteriorly or antero-medially.

## Diagnosis of Internal Derangements

Stage 1	Jaw clicking, no pain
Stage 2	Jaw clicking, intermittent locking, pain
Stage 3	Chronic Closed Lock, severe pain
Stage 4	Early Degenerative Osteoarthritis, pain
Stage 5	Advanced Degenerative Osteoarthritis, Crepitus, pain



**NORMAL JAW JOINT**



**ANTERIOR DISPLACED DISC  
CONDYLE POSTERIORLY DISPLACED**

Since internal derangements get progressively worse over time, it is essential that treatment be instigated as early as possible.

The posterior ligament attaches the disc to the posterior part of the glenoid fossa. This ligament becomes more stretched the longer the disc is anteriorly or antero-medially displaced. Eventually, the disc becomes permanently dislocated anterior to the condyle in the latter stages of internal derangement and this leads to jaw locking and eventually to crepitus if the ligament becomes perforated.

Once the posterior ligament is stretched more than 30%, it becomes permanently deformed and cannot pull the disc back on the head of the condyle. This stretching or tearing of the posterior ligament can occur due to trauma, whiplash injuries, intubation procedures in hospitals, complicated wisdom teeth extractions, or due to prolonged posteriorly displaced condyles.

The purpose of the disc (cartilage) is to act like a shock absorber between the two bones, the condyle and the articular eminence of the temporal bone. When the protective disc is out of position, this dislocated temporomandibular joint causes the surrounding muscles of mastication to go into spasm. This is what causes many of the signs and symptoms of TM dysfunction such as headaches, ringing in the ears, ear pain, pain behind the eyes, etc. These symptoms can also be caused by the posteriorly displaced condyles, which compress the nerves and blood vessels behind the condyle. When these delicate blood vessels and nerves are compressed, this causes inflammation and pain.

The treatment for intra-capsular problems is to reposition the lower jaw with functional jaw orthopedic appliances or repositioning splints so that the condyles are moved down and forward away from the nerves and blood vessels.

This Phase I Diagnostic Phase that usually lasts 4 to 6 months. The objective of Phase I, Jaw Stabilization phase, is to first diagnose whether or not this is an extra-capsular or an intra-capsular problem. Then the appropriate splints (orthotics) or functional appliances are used which are specifically designed to treat the problem.

Some dentists are taught in dental school that the correct position of the condyle in the fossa is upwards and backwards. A careful review of the anatomy of the TM joint reveals that this could not possibly be the correct position since the nerves and blood vessels occupy the area posterior to the head of the condyle. The fact is that most patients suffering from internal derangements (disc displacement) with clicking jaws upon opening and closing or jaws locking, have the condyles posteriorly displaced.

The treatment objective of Phase I is to reduce the signs and symptoms of TM dysfunction, improve the range of motion of the lower jaw, reduce the painful muscle spasms and, if possible, to recapture the anteriorly displaced disc and establish a normal disc-condyle relationship.

## **Diagnosis of Internal Derangements and Summary of TMJ Treatments**

**Stage One Treatment**                      Jaw clicking, no pain  
The RCDSO in Ontario in the guidelines March 2018 have stated that they recommend no treatment.

**Stage Two Treatment**                      Jaw clicking, intermittent locking, pain  
Daytime Centric Relation Indexed Splint to try and recapture the anteriorly displaced disc by moving the mandible forward.  
Nighttime Upper Anterior Deprogrammer with an Incisal Ramp to keep the mandible forward at night.

Dr. Clifton Simmons, world renowned TMD clinician, innovator and lecturer has written many articles on this subject. His research indicates that when the click is eliminated when the patient opens and closes in the new forward position, this eliminates over 94% of the TMJ symptoms.<sup>5</sup>

**Stage Three Treatment**                      Chronic Closed Lock, pain  
Limited interincisal opening 10-26 mm (normal 50 mm)  
Jaw deviates on opening to the side of the lock jaw  
Must manually unlock jaw within 6 months.  
Lower indexed daytime splint for eating.  
Lower Distraction Appliance worn full time except when eating to try and unlock the jaw.  
Surgery of the TMJ is the last resort. Poor success rate.

**Stage Four Treatment** Early Degenerative Osteoarthritis  
 Lower Centric Relation Indexed Splint, daytime  
 Upper Anterior Deprogrammer with an incisal ramp  
 Refer to a dentist who treats TMD patients regularly

**Stage Five Treatment** Advanced Degenerative Osteoarthritis  
 Crepitus, pain  
 Refer to dentist who treats TMD patients regularly.

**Treatment Objectives for TM Dysfunction**

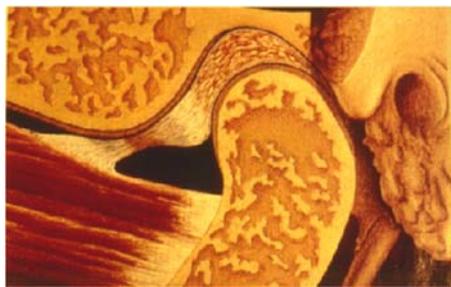
It is extremely important to establish proper condylar position when treating TM Dysfunction. Some dentist who graduated years ago were taught that the condyle should be up and back when the patient occludes in centric occlusion. A careful review of the anatomy of the TM joint reveals that is incorrect since several nerves and blood vessels occupy the area between the posterior border of the condyle and the ear. When the condyle is posteriorly displaced this frequently causes ear symptoms such as vertigo, stuffiness or pain the ear and sometimes tinnitus (ringing in the ear).

Clinically I have taken TMJ x-rays (tomogram x-rays) of the temporomandibular joint for over 25 years and have confirmed the fact that most patients suffering from internal derangement within the TM joint (clicking jaw on opening and closing) have the condyles posteriorly displaced. The treatment of choice is to wear a lower indexed splint during the daytime to stabilize the jaw downward and forward to eliminate the click. An anterior deprogrammer with an incisal ramp to hold the mandible forward at night is also the treatment choice. (Farrari 2 Appliance).

The physiologically correct position of the condyle in the glenoid fossa is known as Centric Relation which places the condyle in an anterior superior position with the disc in the correct relationship on the anterior portion of the condyle.



**NORMAL JAW JOINT. NORMAL POSTERIOR JOINT SPACE**



**STAGE TWO. CONDYLE POSTERIORLY DISPLACED  
 DISC ANTERIORLY DISPLACED  
 COMPRESSION OF NERVES AND BLOOD VESSELS**



**STAGE FIVE. ADVANCED DEGENERATIVE OSTEROARTHRITIS  
 PERFORATION OF POSTERIOR LIGAMENT CREPITUS**

Patients that have anteriorly displaced discs with reduction ideally need to have the condyles into the correct position to reduce the disc. Change the position of the mandible so the disc goes to its correct anatomical position.

There have been numerous articles published on the advantages of using Anterior Repositioning (Centric Relation) splints as opposed to flat plane maxillary occlusal splints.

A research paper from the University of Lund, School of Dentistry and the University Hospital (Sweden) specifically compared the flat plane splint and the anterior repositioning appliance. The article was published in 1988 in **Oral Surgery, Oral Medicine, Oral Pathology** (66: 155-162), written by H. Lundh, Per-Lennart Westesson, Sven Jirander, and Lars Eriksson<sup>2</sup> entitled "Disk repositioning onlays in the treatment of temporomandibular joint disk displacement. Comparison with a flat occlusal splint and with no treatment."

Sixty-three patients had arthrograms taken which confirmed the diagnosis of disc displacement with reduction (Stage 2 of internal derangement) and were randomly assigned to three treatment groups. The arthrograms confirmed that all sixty-three patients revealed posteriorly displaced condyles and anteriorly displaced discs when they occluded in centric occlusion.

The arthrograms further concluded that all 63 patients had the discs recaptured when they moved their lower jaws forward to an end to end position with the upper and lower incisors. All patients in the study had malocclusions consisting of overjets and overbites that varied from 1 – 10 mm.

1. **Group 1** had silver onlays cemented to the lower posterior teeth in such a way that they held the lower jaw forward into the end to end position so that the anteriorly displaced discs would be recaptured. After placement of the disc repositioning onlays, the clicking stopped when the patients occluded on their front teeth, which indicated that the discs had been recaptured. Arthrograms taken with the silver onlays on the posterior teeth confirmed that the discs returned to their normal position between the condyle and articular eminence of the glenoid fossa.

Clinicians today find it much easier to fabricate lower anterior repositioning appliances out of acrylic since they are easier to adjust than silver onlays. The main advantage that silver onlays have over the removable splints is that they are fixed.

If patients have problems speaking with the removable anterior repositioning appliances, a fixed alternative would be to attach acrylic onlays to the posterior teeth that ensure cooperation.

2. **Group 2** had flat plane maxillary splints fabricated for the upper arch. This splint was worn at night only for the purpose of decompressing the TM joints and was adjusted so there were no occlusal interferences in centric occlusion. One of the problems with flat plane maxillary splints is that the mandible has no definite spot in which to occlude and, in most instances, the mandible goes more retrognathic

at night especially if the patient sleeps supine which causes the condyles to become more posteriorly displaced.

The authors of this study as well as many others have proven that flat plane occlusal splints (standard design for upper nightguards) do not recapture anteriorly displaced discs. This must be the objective of any clinician.

The arthrograms showed that at the beginning of treatment the condyles were posteriorly displaced, so why would you want to perpetuate this problem with the maxillary flat plane splint? Arthrograms taken with the flat plane maxillary splint confirmed that the anteriorly displaced discs were not recaptured because this splint did not allow for the posteriorly displaced condyles to come forward.

1. **Group 3** was the untreated control group treating patient with Stage 2 Internal Derangements.

After six months of treatment, a clinical examination of the 63 patients revealed the following:

1. **Group 1**, with the silver onlays that recaptured the anteriorly displaced discs (fixed repositioning splint), had improved joint function, reduced joint noise and reduced muscle pain compared to the beginning of treatment. Prior to treatment, these patients complained of clicking and jaw locking. After the 6 months treatment with the silver onlays (anterior repositioning), the clicking and locking were eliminated.
2. **Group 2**, with the flat plane maxillary splint, showed no decrease in symptoms of TM dysfunction.

***The vast majority of dentists in North America and throughout the world have been trained in dental school to fabricate only one appliance to help treat patients with TM dysfunction and bruxism. It is clear from this study as well as numerous others that this information is incorrect. It is time for the entire dental profession to re-evaluate the literature and revise the curriculum to reflect current thinking in the treatment of patients with signs and symptoms of TM dysfunction.***

3. **Group 3**, with no treatment, obviously showed no decrease in signs and symptoms of TM dysfunction.

Following the 6 months treatment, the silver onlays were removed from 20 of the 21 patients in Group 1. One very intelligent patient refused to have the silver onlays removed since they had significantly reduced his symptoms. He simply left the hospital with his silver onlays intact and his condyles in the proper position.

When the silver onlays were removed, the twenty patients were left with a posterior open bite. This is normal for patients with anteriorly displaced discs prior to treatment and whose discs were recaptured following treatment with anterior repositioning appliances. The condyle moves downward and forward away from the nerves and blood vessels in the bilaminar zone distal to the condyle. This "new" condylar position is now very unstable

and it is important to either correct this posterior open bite orthodontically, restoratively or prosthetically. Otherwise, the patient will attempt to get their posterior teeth to touch so they can chew their food and the condyles will once again become posteriorly displaced and the discs anteriorly displaced.

This is exactly what happened to 19 out of 20 patients involved in Group 1 of this study after 6 weeks. The pre-treatment signs and symptoms of TM dysfunction returned, including headaches, ear pain, joint pain, facial pain, reduced range of motion, and the TM joints started clicking and locking again.

***The conclusion of the authors was that for long-term success, they recommend a Phase II treatment in order to permanently change the occlusion in such a way to support the new condyle-disc-fossa relationship that was established with the silver onlays that functioned as a fixed anterior repositioning splint. Many clinicians who treat these patients worldwide have formed a similar conclusion.***

Another excellent study published in the **Journal of Cranio Mandibular Practice**, October 2002, entitled, “Temporomandibular Disorder Treatment Outcomes”, Second Report, by Donald T. Brown, D.D.S., M.S. and Elmer L. Gaudet, D.D.S., M.S.D., involved 2,104 treated and 250 untreated patients. They used the TMJ Scale to validate the results.

One obtained conclusion indicated that untreated patients do not improve spontaneously over time as some authors have stated.

- a) Patients can be treated successfully with a variety of different modalities on a long term basis.
- b) The use of anterior repositioning therapy produced better results than flat plane splint therapy.

Anderson et al <sup>9</sup> have shown that mandibular repositioning has produced significant subjective and objective improvement in muscle pain when compared with a flat plane occlusal splint.

Lundh et al <sup>8</sup> demonstrated that an anterior mandibular repositioning splint is more effective than a flat plane splint in reducing clicking and tenderness to palpation of the temporomandibular joints and muscles.

The standard of care today to diagnose the position of the disc in centric occlusion is the MRI (Magnetic Resonance Imagery) of the TMJ.

### **JOINT VIBRATION ANALYSIS ([www.bioresearchinc.com](http://www.bioresearchinc.com))**

Joint Vibration Analysis (JVA) is a device that measures vibrations in the temporomandibular joint when the patient opens and closes. Most clinicians measure these vibrations by palpating the TMJ when the patient opens and closes. Palpation is called subjective findings. JVA is a way to objectively assess our patient’s joint health and document both the pre-treatment conditions and the response to the treatments we provide. Joint Vibration Analysis is based on simple principles of motion and friction.

When smooth surfaces rub together, little friction is created and thus little vibration. In a normal functioning TMJ there is little vibration or noise upon opening and closing. However, if surfaces become rough such as occurs with displaced discs or perforations they produce vibrations. Different problems within the TM joint produce different vibrations which help the clinician to determine what Stage of Internal Derangement is evident in both the right or left temporomandibular joints. The JVA is a great screening test since it has such a high specificity (reference here)

It is also low cost, ideal way to monitor joint function during the course of treatment. The JVA can be taken at various stages of treatment to confirm that the splints you have fabricated for the patient has the mandible in the correct position. While the JVA does not eliminate the need for expensive imagery using the MRI, it allows the practitioner to make a more informed decision whether the cost of imagining is justified. (reference here – Intro to JVA)

## **WEANING**

The RCDSO Guidelines recommend that all TMJ patients be weaned off the lower indexed splint following 4-6 months once the signs and symptoms have improved. There are 2 possible situations:

1. The anteriorly displaced disc returns to its proper position in the anterior superior joint of the condyle and the patient's symptoms have vastly improved. No more clicking upon opening and closing. Patient's bite has not changed. Patient is encouraged to keep wearing the maxillary anterior deprogrammer with the incisal ramp (Farrari 2 Appliance) to keep the lower jaw forward at night. Patient is encouraged to keep the lower indexed splint and to wear it intermittently if the disc becomes dislocated again. No further treatment is necessary.

This scenario is the most frequent in the following situations:

- a) Class I skeletal maxilla and mandible are related normally to each other.
- b) Acute injury dislocated the disc.
- c) Trauma due to extraction of wisdom teeth.
- d) Motor Vehicle Accidents.
- e) Intubation procedures in hospitals.

2. The anteriorly displaced disc returns to its proper position and the symptoms are reduced significantly. The patient's bite is not normal. There is a posterior open bite, new nerves and blood vessels have formed distal to the condyle and it is very painful when the patient tries to occlude on the posterior teeth.

### **Solution:**

- 1) The patient will have to keep wearing the lower indexed splint indefinitely as well as the upper Anterior Deprogrammer or the pain and discomfort will return.

- 2) Phase II: Permanent Solutions to close the posterior open bite
  - Orthodontics
  - Crown and Bridge
  - Overlay Partial Dentures
  - Complete Dentures
  - Partial Dentures

My clinical experience has been that weaning the patient off the lower indexed splint is more successful in acute cases caused by a traumatic event as I discussed earlier.

Patient with a history of chronic disc displacement (more than 6 months) usually cannot be successfully weaned off their lower indexed Centric Relations Splint. These cases usually require a more permanent solution. Phase 2 orthodontics, restorative or prosthetic case finishing to re-establish a proper occlusion.

### **SUMMARY OF RECOMMENDATIONS FOR GENERAL DENTISTS**

1. Try to diagnose if the patient has an Internal Derangement (clicking jaw).
2. If the patient has an Internal Derangement, which Stage is present.
3. Do not prescribe occlusal flat plane splints for patients who click on opening and closing (Stage 2 Internal Derangement).
4. If the patient has an Acute Closed Lock refer them immediately to a qualified dentist to manually unlock them within the first 6 months.
5. Does the patient have an External Derangement? Check if pain upon awakening to bruxism. Check for evidence of sore muscles.
6. If you suspect snoring or sleep apnea do not fabricate an upper flat plane nightguard as you could close the airway at night and make the situation worse.
7. If the dental school did not adequately train you to treat these patients, sign up for a course that will teach you how to properly treat the 34% of the adults in your practice that have the problem. Start making a commitment to be concerned with the overall health of your patients.
8. If you do not want to learn to treat these patients find a colleague in your area who has received special training on how to diagnose and treat these patients and refer your patients.