## **JAW STABILISATION EXERCISES**

These are exercises to help control TMJ (jaw joint) hypermobility, tooth grinding and jaw clenching. They are unlikely to cure the problem, but they will greatly assist any treatment being received, will help prevent the condition from deteriorating, and may provide temporary reduction in the symptoms associated with the TMJ misalignment. They are based on exercises recommended by a Dentist specialising in TMJ problems (Sean O'Geary BDS). If you have any questions, please contact Andrew Cook.

Please note that these exercises DO NOT replace treatment, and application of them without supervision is at your own risk. If you find that they decrease your symptoms, this is a good indication that your TMJ is misaligned, and professional experience indicates that this is better addressed sooner rather than later. This may be a local problem, or more related to teeth, facial bones, spine, shoulders, or even pelvic alignment, and you would be greatly assisted by seeking treatment from a Craniosacral Therapist or Cranial Osteopath (or Cranial Orthodontist - see <a href="http://www.craniogroup.com/">http://www.craniogroup.com/</a> ).

### **EXERCISE 1 :** Stabilisation exercise 1

TIME : 2 minutes maximum, repeat 3 times daily or more

a. Open your mouth, until you feel the cheek muscles begin to stretch. This is **no more than** about <sup>3</sup>/<sub>4</sub> fully open. (*OPTION* : Do this in front of a mirror, and attempt to make the opening and closing movement into a straight line, maintaining the vertical alignment between the central gap between teeth on top and bottom jaws)

b. Hold this position for 20 seconds

c. Close mouth until lips touch (OPTION : Do this in front of a mirror, and attempt to make the closing movement into a straight line)

d. Repeat FIVE times

## **EXERCISE 2 :** Stabilisation exercise 2

#### TIME : 1 minute, repeat 3 times daily or more

a. Sit in a chair in front of a table. Rest BOTH of your your elbows on the table in front of you, and cup your hands, placing the chin in your cupped hands. The chin should be resting on the heels of your hands, and the palms and fingers resting gently at the sides of your face.

b. Let your weight sink down onto your hands, stay there for 30 seconds

c. Now sit up straight in the chair, and place your hands on either side of your face. There is a bony ridge at the base of your fingers -place this <u>gently</u> against your cheek so they are resting on the hollow of the line of your teeth. Your fingers will be pointing upwards and resting on your temples, and the heels of your hands will be <u>gently</u> resting on the lower edge of your jaw.

d. Without pushing, allow a feeling of your hands sinking into your face. Lock your elbows against your chest

e. Now, without pulling, IMAGINE your hands are floating down towards the floor, taking your jaw with them. Do this for about 30 seconds

### **EXERCISE 3 : Isokinetic exercise**

TIME : 2 minutes maximum, repeat 3 times daily or more

a. Rest your elbow of one arm on the table in front of you. Make a fist, and rest your chin between the first and second fingers of the fist (not the knuckles!) Brace your forearm against your chest so that it is stable, an dthe chin is evenly weighted against the two fingers.

b. Tense the muscles of your chin so that you are pushing down <u>gently</u> onto your fist with your chin. Keep these muscles tensed throughout the exercise, to resist opening your mouth.

c. Touch the back of your throat with the tip of your tongue

d. Now open and close your mouth slowly, keeping a gentle pressure between your fist and your chin - do this 20 tomes, or until the muscles are tired (whichever is sooner)

Hint : You are actually keeping your chin still, and moving your head in order to open your mouth. Compare this with the way you normally eat and talkdont do anything about it, just allow yourself to observe what you do!

## Other hints for TMJ syndrome

If symptoms change when you lie down (e.g. either noticably better or worse after sleep) then one possible cause is TMJ misalignment. Pressure headaches may also be caused by autonomic nervous system inbalance, or compression of the base of the skull - both of which have a myriad of different possible causes, and both of which can be addressed using CST techniques.

http://www.hummingbird-one.co.uk/pdf/tmj.pdf © Andrew Cook MSc RCST 01603 665173

# Craniosacral Therapy & Orthodontic Braces

## **Jaw Joint Problems**

Jaw joint disorders have many names, the most popular being "TMJD" or temporomandibular joint disorder/dysfunction or "CMD" (craniomandibular disorder). Depending on the severity, symptoms may include all or just some of the following : joint clicking and popping, headache, pain in the joint, limited opening, and locking of the joint open or closed. The problems often seem to start with the muscles of the jaw, face and neck and then deteriorate to some damage of the jaw joint itself. This damage appears to be due to instability of the small mobile cartilage disk that, uniquely in the body, allows the jaw to both hinge and slide at the same time.

The symptoms may appear gradually and be very intermittent or may appear very suddenly for no obvious reason. They tend to worsen with time, so early treatment is best.



Image Courtesy of TMJ Implants, Inc <u>www.tmj.com</u>

Full-blown CMD can result in a vast range of symptoms including back and pelvic pain, depression, palpitations, mood swings, tinnitus and neurological symptoms anywhere in the body. The cause of CMD is invariably some kind of trauma, usually physical, and from a huge range of possible events, including whiplash, a blow or punch to the jaw/head, an uneven bite (new filling or denture?), certain kinds of orthodontic treatment, or even a difficult birth. There are also a surprising number of cases of "ascending" TMD – where a longstanding pelvic misalignment eventually causes displacement of the jaw.

What makes these difficult to classify in any conventional medical perspective is that many people suffer from one or all of the above traumas and do not develop CMD. It would therefore appear that the most significant factor is how we respond to these "causative" events. This phenomenon is called "Adaptive Range" or adaptive capacity. Emotional stress, poor diet, illness, multiple injuries elsewhere in the body and ageing (i.e. an accumulation of all the above) tend to reduce the capacity of the body to adapt to new "traumas".

The term "CMD" is used because there is a strong connection to the alignment of structures in the whole head. It has been found that patients with (e.g.) ears or eyes not on the same level, or unusually shaped heads are more susceptible to jaw joint problems. The same applies to spinal imbalances (a history or back pain or neck pain) because the spine and jaw joints may compensate for each other, in either direction.

The treatment for CMD is as variable as, and dependent on the possible causes. The patient may only need a few visits to a craniosacral therapist, or they may require an orthodontic splint worn between the teeth for several months, or they may need corrective dentistry to change tooth height. In very a few <u>very</u> extreme cases, when all other possible methods have failed, surgery is required to reposition the joint disc. However, surgery should always be a last resort

"Jaw Joint Problems" adapted from "Nutshell News Issue #1 by Noel Stimson LDS (http://www.craniogroup.com)

#### For more information or appointments, please contact

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#### **Orthodontic braces...**

are used to straighten teeth, and are usually applied during teenage years. Their use is usually associated with up to four tooth extractions if the mouth is overcrowded.



Braces help to provide straight and cosmetically attractive teeth, can correct major problems in dental alignment and are thought to have no other medical side effects.

When treating patients using cranial techniques, sometimes all of the tension patterns in the body can be traced back to (and "cured" by releasing) a "locked" upper iaw (Maxilla) and its associated structures.

Because this is always associated with either a history of dental braces or some severe impact or surgery to the face, I have reached the conclusion that that braces can occasionally cause trouble in other parts of the body, either when they are in use, or later in life. Alternatively, the fact that braces were necessary in the first place could well indicate that these conditions were already present. Whichever is the case, CST can often help to unlock these structures so that a more normal movement is restored. Once able to move, the body is then capable of repairing itself.

#### Anatomy of the face

The face comprises a set of thick strong bones (the jaw and cheek bones) set in a frame which is more like a very thin flexible cardboard box. Many bones of the front of the face are as thin as sheet of paper, and are very flexible. The bones of the face are almost all in symmetrical pairs, which are divided by a suture (discontinuity) down the midline. The one exception to this is the Vomer – a bone which connects the midline of the roof of the mouth to the base of the skull just below the pituitary gland. The major part of the face (the upper jaw or Maxilla and the region of the nose, comprising the nasals, turbinates and ethmoid bones) is a very light hollow structure. All these bones of the face hang off the front of the far more solid cranial bowl (the part of the skull which protects the brain).

#### How this is affected by braces?

The whole body is designed to be capable of motion. Even the bones of the skull move, and the bones of the face are no exception to this. It could be that braces simply exacerbate an already present "problem", or the very fact that braces are needed in the first place might indicate that there is something which needs attention. However, whatever the cause, if the facial bones are locked solid, this has an effect on the neck, the shoulder girdle and even the alignment of the pelvis. This is particularly the case if the face is held in an asymmetric position.

### How this affects the rest of the head and body

The exact side effects observed often depend on other factors elsewhere in the body such as minor injuries, birth complications, stress, and so on. However, I have noticed the following acute symptoms during or after a course of orthodontic braces which responded quickly (i.e. reduced or completely vanished) to CST release of an opposing torsion in the Maxilla :

- Headaches, poor concentration, dizziness, a "heavy" face and neck, rigid feeling round the nose, or jaw clenching
- Unusual stiffness anywhere in the body, particularly neck, pelvis and shoulders, pelvic pain, "growing pains"
- Onset or accentuation of scoliosis, back or neck pain, shortening of one leg, sciatica
- General malaise or loss of energy similar to ME symptoms are rare and relatively extreme side effects.

It should be emphasised that most orthodontic work is just slightly uncomfortable but otherwise innocuous.

#### Longer term effects

Very occasionally, the motion of the face does not return when the braces have been removed. In this case, there can be a range of symptoms which appear gradually, including headaches, menstrual difficulties, pelvic misalignment, scoliosis, miscellaneous spinal problems and shortening of one leg. These can occur even if there were no obvious acute problems when the braces were being worn.

Typically, both acute and long-term symptoms are kept at bay by regular exercise. I would guess that some jammed Maxillae resume normal motion sometime after the braces are removed, but on the basis of treatment results I have witnessed, this is clearly not always the case.

## What Craniosacral Therapy (CST) can do...

- It is relatively easy for CST techniques to re-introduce motion to the face and skull, even if braces are still being worn. If any of the above acute or long-term symptoms have been caused by locking of the maxilla (regardless of the original cause), then CST can produce quite substantial results, often in just one or two treatments. If the area of immobility has extended beyond the maxilla into the vomer, palatines and beyond, then more extensive work is sometimes needed.
- If you have braces fitted and have any of the above symptoms, or have other symptoms anywhere in the body which started at the same time as the brace being fitted or tightened, then a small number of CST sessions will usually help to relieve this.
- If you have an adult or teenage onset scoliosis or migraines which started to appear within a few years of a course of orthodontics, then again, this often clears quite quickly with a few sessions of CST.
- If you have any pelvic or leg pain which is worse for *lack of* exercise (and disappears if you exercise regularly), it is likely that the cause of this is a misaligned jaw, probably caused by a misaligned or immobile maxilla (face).
- If you are receiving orthodontic treatment, a CST session now and again often makes the face feel much more comfortable, and appears to assist the adaptation of the maxilla and teeth to the dental treatment. The American Dental Association has found craniosacral therapy to be an effective adjunct to orthodontic work

It is usually best to book a single one-hour appointment – this gives an opportunity for a hands-on diagnosis and about 20 or 30 minutes treatment, which in turn gives a much clearer idea as to how appropriate CST is for any particular condition.