## **ONCOLOGY**



| Temporomandibular joint dysfunction

# A SMALL JOINT, A BIG PROBLEM The minimally invasive surgery as part of the solution

**Dr David Sanz** 

IF you were to be asked to mention various joints of the human body, it is most likely you would mention the knees, ankles, wrists or elbows. But there are many other joints that allow us to make all sorts of movements. Some go more unnoticed than others, as is the case with the joint we use most every day. It is in the head, more accurately near the ears and it is usually only noticed when it hurts.

The temporomandibular joint (TMJ), situated close to the ear, is the joint that joins the skull to the jaw. It allows us to make essential movements such as chewing, talking, smiling and yawning. When this joint does not work well, it is known as a temporomandibular dysfunction (TMD).

In most TMDs, the disc of the fibrocartilaginous joint

that should be situated in the middle of the joint to protect the surface of the two bones becomes displaced. This displacement causes the bones to "scrape against one another" causing pain and discomfort on all movements involving the mouth.

The most common symptoms of TMD are cracking noises of the jaw, pain in the joint, and headache (which often spreads to the neck and back, to the muscles that run through this area), difficulty in opening the mouth and tiredness in muscles used for chewing. There may be several reasons for suffering from TMD, but in most cases there is treatment.

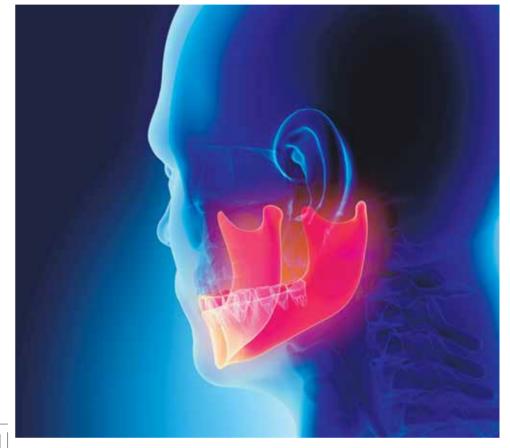
There are different techniques that can be used, depending on the degree of the diagnosed dysfunction. In the simplest cases, it may only be necessary to

control pain and re-educate the muscle without any surgical intervention; in the intermediate cases, minimally invasive techniques can be used to reposition the disc; in the more complex cases, surgery is considered, with extremely satisfactory results.

Once the symptoms described above are identified, it is critical to book an appointment and to find out if the pain is due to TMD. The sooner a diagnosis is reached, the sooner the treatment can begin, and the quality of life and wellbeing restored.

#### Arthrocentesis: minimally invasive surgery of the TMJ

Arthrocentesis of the temporomandibular joint is a minimally invasive technique,



performed most often under local anesthesia. Its main goal is to eliminate inflammatory mediators responsible for pain, to decrease pressure in the joint, release fibrous adhesions as well as to hydrate/lubricate the joint.

In the early stages of problems related to TMJ, an inflammatory process in the disc and joint is responsible for the pain. This technique eliminates these inflammatory mediators, thus contributing to reduced pain.

Joint overload increases intra-articular pressure

substantially. This technique decreases pressure in this joint. In the very early stages or in particular cases, the disk can be repositioned. In these cases, there is a significant disc and joint dehydration, a viscous substance (hyaluronic acid) is injected to lubricate the joint. This will hydrate the TMJ and the disk, contributing to the recovery of a harmonious joint movement.

These procedures are carried out using fine needles so as not to leave any scars.

### Arthroscopy

Dr Onishi first introduced an arthroscope into the temporomandibular joint in 1975. This was the beginning of minimally invasive surgery for the treatment of intra-articular problems of the TMJ.

This technique consists of a very small camera being introduced into the joint, to reach an accurate diagnosis. Small interventions can also be carried out such as repositioning of the disc, treatment of chronic intra-articular inflammation, elimination of joint adhesions, etc.

There are many scientific studies today that recommend arthroscopy for intra-articular treatments, with a success rate above 90%. This technique permits a quick recovery and leaves a small practically imperceptible mark on the skin. The patient can be discharged 6-8 hours after the intervention.

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