TemporoMandibular Joint Syndrome

http://www.tmj.org/

Temporomandibular joint disease - a painful condition affecting the area where the lower jaw connects to the sides of the skull which impairs function and sensation in the face and jaw, which may spread to the ears, neck, and shoulders.

Number of TMJ Sufferers:
More than 10 million people in the United States.

Profile of TMJ Sufferers:
The majority, as high as 90 percent, of TMJ patients are women in their childbearing years.

Causes:
Medical research has not yet defined all the causes of TMJ. Certain dental or medical procedures, oral habits, injury, and a variety of joint diseases and disorders like arthritis, can precipitate or aggravate TMJ.

Diagnosis:
Disagreement over causes and lack of information about TMJ within the medical and dental communities makes diagnosis difficult. Because TMJ problems are poorly understood, patients' symptoms are often attributed to psychosomatic factors.

Symptoms:
- facial pain; jaw joint pain; often in combination with neck, shoulder, back pain and/or headaches
- popping, grating or clicking sounds with movement of the jaw joint
- pain in the joints of the face when opening or closing the mouth, yawning, or chewing
- swelling on the side of the face and/or mouth
- a bite that feels uncomfortable, "off," or as if it is continually changing
- limited opening or inability to open the mouth comfortably
- deviation of the jaw to one side
- the jaw locking open or closed
- swallowing difficulties

Those with the symptoms listed above often report additional ones as well, such as ringing in the ears, ear pain, diminished hearing, dizziness or vertigo, and visual
disturbances. These symptoms may be a facet of TMJ disease or a different disease process occurring simultaneously.

If you or someone you know has these symptoms, The TMJ Association recommends first consulting a medical doctor to rule out other illnesses. If your physician does not diagnose a medical condition, and you are referred to a dentist, we suggest obtaining several independent opinions to confirm your diagnosis prior to committing to any form of treatment.

**Treatment:**

Sometimes TMJ problems resolve over time with patients taking mild pain-relieving drugs and using heat, cold or other palliative measures. At present, there are more than 50 treatments in use ranging from very conservative, reversible therapies to more aggressive, invasive approaches. None of the surgical treatments for severe cases have been proven effective in long-term controlled clinical trials.

**Insurance Coverage:**

Varies from state to state. Many insurance companies do not or only partially cover TMJ-related treatment.

**Can TMJ Diseases/Disorders be Prevented?**:

At present there is insufficient evidence to support the prevention of TMJ diseases/disorders through treatment.

**Treatment Options**

As we learn more about the temporomandibular joint and its associated structures, many in the dental community are reassessing their practice patterns and the basis upon which they were developed. It is clear that the various temporomandibular disorders are far more complex than was previously believed. To find solutions to these problems, it is essential that there be collaboration within the biomedical science community, moving TMJ research to a new level of multidisciplinary research studies involving experts in arthritis; TMJ pathology; bone, joint and muscle physiology; neuroscience, pain management; genetics; endocrinology, immunology; and tissue repair/engineering.

Neither the American Dental Association nor the American Medical Association recognizes treatment of TMJ diseases/disorders as a specialty. As a result, there are no established standard criteria for dental/medical school education. Treatments are based largely on professional beliefs, not scientific evidence. Today there are more than 50 different treatments available, often reflecting the type of provider seen.

**Educate Yourself**

If your jaw pain gets worse with time, you should get professional advice. However, first and foremost educate yourself. Find out as much as you can by reading, particularly, the NIH Technology Assessment Conference Statement of the National Institutes of Health, and by talking with other people who have TMJ. Informed patients are better equipped to talk with professional providers, ask questions, and make decisions. Proceed cautiously and get several independent opinions before embarking on any suggested irreversible treatment. An independent opinion means going outside your doctor's practice or institution and
not being referred by that doctor to another. Often TMJ patients are in pain and may also be taking pain medication, which can impair cognitive ability. This is one reason we recommend TMJ patients find a person they can trust to be their advocate to go with them to doctor appointments. Your patient advocate doesn't have to be a family member, but should be someone who isn't afraid to ask questions on your behalf, will ensure your safety as a TMJ patient and can assist you in making your health care decisions. We recommend taking notes during your doctor appointments. We have put together a listing of questions you should ask a physician before consenting to any treatment:

- What is the purpose of the proposed treatment and why is it necessary in my case?
- Is the treatment reversible or is it irreversible?
- Will this treatment reduce my pain?
- What side effects or complications may I experience?
- Has the proposed treatment been studied in clinical trials?
- What other treatments are available?
- What are the advantages of the proposed treatments over other forms of treatments with respect to benefits and risks?
- Are there any known complications and, if so, how will these be addressed?
- What will happen to me if I leave this condition untreated?
- How much will the proposed treatment cost, and how do these costs compare with other forms of treatment?
- How many follow-up treatments will be necessary?
- Will insurance cover the treatment costs?
- Is there a contract I must sign?

Your health care provider should answer these questions in language you understand. If you don't understand any part of a discussion with your health care professional, it is important to ask him or her to explain it again in more simple terms. If your provider will not answer these questions, find one who will. You must be your own health care advocate.

Reversible Treatments

Reversible treatments do not invade the tissues of the face, jaw, or joint. They do not cause permanent, or irreversible changes in the structure or position of the jaw or teeth. A stabilization splint (also known as a flat plane splint or occlusal appliance), which does not cause any change in your bite, is considered a reversible treatment. Reversible treatments can be useful for relief of TMJ and jaw muscle pain. Experts convened at an NIH Technology Assessment Conference held in 1996 concluded that reversible approaches, along with adequate measures of pain relief, are the treatments of choice.

Irreversible Treatments

Irreversible treatments should be avoided when possible and not rushed into. According to the National Institute of Dental and Craniofacial Research, most irreversible treatments are of little value-and may make the problem worse. These include orthodontics to change the bite, occlusal adjustment, and grinding down teeth to bring the bite into balance. A mandibular repositioning splint (often referred to as an orthotic) is also considered an irreversible treatment. The safety and efficacy of most TMJ treatments, including TMJ surgeries and jaw implants, have not been demonstrated in clinical trials. Scientists strongly recommend using reversible treatments before considering invasive treatments. Even when the TMJ problem has become chronic, most patients still do not need invasive types of treatment.

Efficacy of TMJ Treatments

In 1996, the National Institutes of Health (NIH) held a conference titled Management of Temporomandibular Disorders. After presentations and evaluation it was concluded that no treatment for TMJ demonstrated effectiveness and that invasive interventions warranted caution. Two summaries of the available literature, conducted in 2001 also confirmed the lack of reliable information about TMJ diseases/disorders. They too found little scientific information to support the effectiveness and safety of TMJ treatments and in many cases the most commonly prescribed treatments were found to be ineffective or minimally effective. These studies were conducted by the Agency for Healthcare Research and Quality (AHRQ), prepared by The Lewin Group, titled "Study of the Per-Patient Cost and Efficacy of Treatment for Temporomandibular Joint Disorders", and by the Emergency Care Research Institute (ECRI), a nonprofit health service research agency, which prepared a Technology Assessment Report titled "Temporomandibular Articular Disorders: Selected Treatments".
Unfortunately, clinical trials, comparing different forms of treatment with respect to their efficacy are lacking for most forms of treatments offered today. On the other hand, keep in mind that efficacy is only one aspect of a given treatment. Treatments that are claimed to be marginally superior over others, may be linked to higher levels of complications which in turn may question their usefulness for many patients.

Can TMJ Diseases/Disorders be Prevented?
At present there is insufficient evidence to support the prevention of TMJ diseases/disorders through treatment.