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PERSONAL HEALTH

Best Treatment for TMJ May Be Nothing

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One person gets migraine headaches, another ringing in the ears, a third clicking and locking of the jaw, a fourth pain on the sides and back of the head and neck. All are suspected of having a temporomandibular disorder.

Up to three-fourths of Americans have one or more signs of a temporomandibular problem, most of which come and go and finally disappear on their own. Specialists from Boston estimate that only 5 percent to 10 percent of people with symptoms need treatment.

Popularly called TMJ, for the joint where the upper and lower jaws meet, temporomandibular disorders actually represent a wider class of head pain problems that can involve this pesky joint, the muscles involved in chewing, and related head and neck muscles and bones.

But too often, experts say, patients fail to have the problem examined in a comprehensive way and undergo costly and sometimes irreversible therapies that may do little or nothing to relieve their symptoms. As scientists at the National Institute of Dental and Craniofacial Research wrote recently, “Less is often best in treating TMJ disorders.”

A New Understanding

The TMJ is a complicated joint that connects the lower jaw to the temporal bone at the side of the head. It has both a hinge and a sliding motion. When the mouth is opening, the rounded ends, or condyles, of the lower jaw glide along the sockets of the temporal bones. Muscles are connected to both the jaw and the temporal bones, and a soft disc between them absorbs shocks to the jaw from chewing and other jaw movements.

TMJ problems were originally thought to stem from dental malocclusion — upper and lower teeth misalignment — and improper jaw position. That prompted a focus on replacing missing teeth and fitting patients with braces to realign their teeth and change how the jaws come together.

But later studies revealed that malocclusion itself was an infrequent cause of facial pain and other temporomandibular symptoms. Rather, as the Boston specialists wrote recently in The New England Journal of Medicine "the cause is now considered multifactorial, with biologic, behavioral, environmental, social, emotional and cognitive factors, alone or in combination, contributing to the development of signs and symptoms of temporomandibular disorders."

According to the American Academy of Orofacial Pain, the disorder "usually involves more than one symptom and rarely has a single cause."

Among the "mechanical" causes that are now recognized as distorting the function of the TMJ are congenital or developmental abnormalities of the jaw; displacement of the disc between the jaw bones; inflammation or arthritis that causes the joint to degenerate; traumatic injury to the joint (sometimes just from opening the mouth too wide); tumors; infection; and excessive laxity or tightness of the joint.

But the most common TMJ problem is known as myofacial pain disorder, a neuromuscular problem of the chewing muscles characterized by a dull, aching pain in and around the ear that may radiate to the side or back of the head or down the neck. Someone with this disorder may have tender jaw muscles, hear clicking or popping noises in the jaw, or have difficulty opening or closing the mouth. Simple acts like chewing, talking excessively or yawning can make the symptoms worse.

Jaw-irritating habits, like clenching the teeth or jaw, tooth grinding at night, biting the lips or fingernails, chewing gum or chewing on a

pencil, can make the problem worse or longer lasting. Psychological factors also often play a role, especially depression, anxiety or stress.

Proper Assessment

The overwhelming majority of people with TMJ symptoms are women. Women represent up to 90 percent of patients who seek treatment, Dr. Leonard B. Kaban, chief of oral and maxillofacial surgery at the Massachusetts General Hospital in Boston, said in an interview. Most patients are middle-age adults, he and two dental specialists, Dr. Steven J. Scrivani and Dr. David A. Keith, wrote in the journal article.

Dr. Kaban urged patients to obtain a thorough assessment of the problem before choosing therapy, especially if they have symptoms like tinnitus (ringing in the ears) and migraine headaches.

He said doctors and dentists should "start with a thorough history — you can get 80 to 90 percent of the needed information just from talking to the patient about their habits." This should be followed by a physical examination, checking for signs like muscle tenderness and pain in the jaw, limited jaw opening and noises.

"Among the biggest advances in diagnosis has been imaging studies, especially by M.R.I. and occasionally by CT scan with a cone-beam image," Dr. Kaban said.

For those with complicated problems, he suggested visiting a multidisciplinary temporomandibular clinic, found at many leading hospitals and dental schools.

Therapy Options

Resting the jaw is the most important therapy. Stop harmful chewing and biting habits, avoid opening your mouth wide while yawning or laughing (holding a fist under the chin helps), and temporarily eat only soft foods like yogurt, soup, fish, cottage cheese and well-cooked, mashed or pureed vegetables and fruit. It also helps to apply heat to

the side of the face and to take a nonsteroidal anti-inflammatory medication, for up to two weeks.

Other self-care measures suggested by the orofacial academy include not leaning on or sleeping on the jaw and not playing wind, grass or string instruments that stress, strain or thrust back the jaw.

Physical therapy to retrain positioning of the spine, head, jaw and tongue can be helpful, as can heat treatments with ultrasound and short-wave diathermy.

Some patients are helped by a low-dose tricyclic antidepressant taken at bedtime, or antianxiety medication. Stress management and relaxation techniques like massage, yoga, biofeedback, cognitive therapy and counseling to achieve a less frenetic work pace are also helpful, according to the findings of a national conference on pain management.

If you clench or grind your teeth, you can be fitted with a mouth guard that is inserted like a retainer or removable denture, especially at night, to prevent this joint-damaging behavior.

But Dr. Kaban cautioned against embarking on “any expensive, irreversible treatment” before a thorough diagnosis is completed and simple, reversible therapies have been tried and found wanting.

As with other joints, he said, surgery is a treatment of last resort, when medical management has proved ineffective. As he and his colleagues wrote, surgery is primarily for patients who are born with or develop jaw malformations and patients with arthritis who have loose fragments of bone or require condyle reshaping.