CONDITION

TMJ disorders

TMJ disorders cause pain or movement problems in the jaw joints and surrounding muscles.

WHAT IT IS
Pain or movement problems affecting jaw joints and muscles

BODY SYSTEM
Muscles, joints, and nervous system

MAIN SYMPTOMS
Jaw pain, limited movement, locking, painful clicking

WHAT CAUSES IT
Often unclear; strain, injury, arthritis, and pain sensitivity contribute

HOW IT IS DIAGNOSED
Symptom history and jaw examination; imaging for selected cases

MAIN TREATMENT
Self-care, pain relief, physical therapy, and dental devices

CAN IT BE CURED?
Sometimes - symptoms settle with conservative care

IS IT AN EMERGENCY?
Sometimes - breathing trouble, major injury, or infected swelling

LONG-TERM OUTLOOK
Most improve, though symptoms can recur or persist

Overview

The temporomandibular joints connect your lower jaw to your skull. There is one just in front of each ear. These joints work with the jaw muscles so you can speak, chew, swallow, and yawn.

A temporomandibular disorder, usually shortened to TMD, is a problem involving these joints, the chewing muscles, or both. People often call it "TMJ," but TMJ is the name of the joint rather than the disorder.

TMD may cause pain, restricted jaw movement, or a jaw that catches or locks. Symptoms can be short-lived or can return over months and years. They may affect eating, sleep, work, and other daily activities.

Painless clicking or popping is common and does not always mean that the joint is damaged. It

usually does not need treatment unless it comes with pain, locking, or difficulty moving the jaw.

Symptoms

TMD symptoms may affect one or both sides of your face. The pain may be dull and aching, or it may become sharper when you chew or move your jaw.

Common symptoms include:

Some people notice that their bite feels different during a flare. This may happen because painful or tight muscles change how the jaw moves. A lasting change in your bite needs assessment because dental problems, joint disease, or an injury may also cause it.

Jaw symptoms can come from conditions other than TMD. Tooth decay, a dental abscess, sinus problems, nerve pain, ear disease, and some types of headache can cause pain in the same area.

- Pain around the jaw, cheek, temple, or in front of the ear
- Difficulty opening the mouth fully
- A jaw that catches, locks, or feels stiff
- Painful clicking, popping, or grinding in the joint
- Headache or pain spreading into the face or neck
- Earache, pressure, or ringing without an ear infection
- Pain when chewing or biting

Causes and risk factors

TMD does not always have one clear cause. Symptoms may develop through a combination of joint strain, muscle tension, injury, and changes in how the nervous system processes pain.

Possible contributing factors include:

Stress does not mean that the pain is imaginary. It can increase clenching, disturb sleep, and make the nervous system more sensitive to pain.

Teeth that do not meet perfectly are not considered a simple explanation for most TMD. Braces, wisdom teeth, and everyday bite differences have also not been shown to explain every case.

- Clenching or grinding the teeth, especially when it is frequent

- Repeated gum chewing or other heavy jaw use
- A blow to the face or another jaw injury
- Arthritis affecting the jaw joint
- Movement or damage of the small cartilage disc inside the joint
- Stress, poor sleep, or anxiety that increases muscle tension
- Long-lasting pain conditions, such as fibromyalgia or migraine

Diagnosis

There is no single blood test or scan that confirms every TMD. Diagnosis is usually based on your symptoms and a physical examination.

A dentist, primary care clinician, or another qualified professional may ask when the pain began, what makes it worse, and whether the jaw locks. They may examine your teeth and mouth, measure how far the jaw opens, and feel the joints and chewing muscles while you move.

Imaging is not needed for every person. It may be considered if there was an injury, the jaw keeps locking, treatment has not helped, or another joint problem is suspected.

Different scans show different structures. An MRI can show the joint disc and other soft tissues. A CT or cone-beam CT scan gives more detail about bone. A standard dental X-ray may help identify dental disease or obvious bone changes but cannot show every cause of TMD.

Blood tests may be used when inflammatory arthritis, infection, or another medical condition is suspected. They do not diagnose routine muscle-related TMD.

Treatment and management

Treatment usually begins with conservative care. This means using treatments that do not permanently change the teeth, bite, or jaw joint. Many episodes improve with time and simple measures.

During a flare, it may help to reduce activities that put extra load on the jaw. This can include gum chewing, biting hard foods, nail biting, and opening very wide. Softer foods may be more comfortable for a short period, but a long-term restricted diet is rarely the goal.

Warm or cold packs may ease pain for some people. Gentle jaw exercises can help restore

movement, but the right exercise depends on the problem. A physical therapist or other trained professional can show you how to perform them without forcing the joint.

Pain medicines may be used for short periods. Options can include acetaminophen, also called paracetamol, or nonsteroidal anti-inflammatory drugs such as ibuprofen. These medicines are not safe for everyone and can interact with other treatments. A pharmacist or clinician can help you check whether they are suitable. Prescription medicines are sometimes considered for persistent muscle spasm or chronic pain.

A dental splint or night guard may help selected people, particularly when tooth grinding is also damaging the teeth. It does not correct every type of TMD. A device that causes pain or changes your bite should be reviewed rather than adjusted at home.

Physical therapy may focus on jaw movement, posture, muscle function, and related neck pain. For persistent symptoms, relaxation training, cognitive behavioural therapy, and other pain-management approaches can reduce the effect of pain on sleep and daily life.

Injections or surgery are reserved for selected problems, such as severe structural joint disease or ongoing locking that has not responded to appropriate non-surgical care. Procedures that permanently reshape healthy teeth or change the bite are not routine first treatments for TMD. Evidence for botulinum toxin injections is still uncertain, and they can cause side effects such as chewing weakness.

Complications

TMD is not usually dangerous, but continuing symptoms can affect daily life. Pain may make it difficult to eat a balanced diet, sleep well, talk for long periods, or concentrate at work or school.

Repeated guarding of the jaw can lead to stiffness and reduced movement. Persistent pain may occur alongside headaches, neck pain, low mood, or anxiety. These problems can reinforce one another without meaning that any symptom is "all in your head."

Treatments can also cause problems. Frequent use of some pain medicines may lead to side effects. Poorly fitted dental devices can worsen pain or alter the bite. Irreversible dental work or surgery carries greater risks and should have a clear reason and expected benefit.

Prevention

There is no certain way to prevent every TMD because the cause is often mixed or unknown. TMD related to arthritis or an unexpected injury may not be preventable.

You may be able to reduce strain or limit flares by noticing habits such as daytime clenching, gum chewing, or biting objects. When your jaw is resting, your teeth do not need to touch. Protecting your face during contact sports can reduce the risk of jaw injury.

Managing sleep problems and stress may reduce muscle tension for some people. If you grind your teeth, dental assessment may help protect them, although a night guard cannot guarantee that TMD will be prevented.

Living with it and what to expect

Many episodes improve over weeks or months with conservative care. Symptoms may fade completely, remain mild, or return during periods of heavy jaw use, poor sleep, illness, or stress. It is not possible to predict the exact course for one person.

Joint clicking can remain after pain improves. A painless sound by itself does not necessarily mean that the condition is getting worse.

A smaller group develops persistent or recurring pain. Management then usually focuses on maintaining jaw movement, reducing flare triggers, improving sleep and function, and treating related headache, neck pain, or mood symptoms. This approach can improve quality of life even when symptoms do not disappear completely.

Try to return gradually to normal eating and jaw use as pain allows. Avoiding movement for a long time can increase stiffness and fear of movement. Progress is not always steady, and a brief flare does not necessarily mean that new damage has occurred.

Routine follow-up may be useful if symptoms are not improving, your treatment device no longer fits comfortably, or pain is interfering with eating, sleep, or daily activities.

When to get medical help

Arrange a routine dental or medical assessment if jaw pain keeps returning, does not settle, limits eating, or comes with repeated locking. You should also be assessed for a new bite change, persistent swelling, unexplained weight loss, or numbness in the face.

Seek urgent medical or dental care if:

Call emergency services if facial or mouth swelling makes it difficult to breathe or swallow. Major facial trauma, heavy bleeding, confusion, or loss of consciousness also needs emergency care.

Jaw discomfort can rarely be referred pain from the heart. Call emergency services for new jaw

pain with chest pressure, shortness of breath, sweating, nausea, faintness, or pain spreading into the arm, shoulder, or back.

- Your jaw becomes stuck open or closed
- You cannot drink or manage saliva because movement is restricted
- You have facial swelling, fever, or worsening dental pain
- Symptoms began after a significant blow or other facial injury
- Your bite suddenly changes after an injury

Common questions

What does TMJ stand for?

TMJ stands for temporomandibular joint. It is the joint connecting your lower jaw to your skull. TMD is the usual abbreviation for disorders affecting the joint or nearby muscles.

Is jaw clicking always a TMJ disorder?

No. Clicking without pain or restricted movement is common and often needs no treatment. Clicking that is painful, begins after an injury, or comes with locking should be assessed.

Can a TMJ disorder go away on its own?

Yes, some episodes settle with time and conservative care. Others return or become persistent. Symptoms lasting longer or interfering with eating and sleep deserve a routine assessment.

Is TMD caused by stress?

Stress can increase clenching, muscle tension, and pain sensitivity, but it is rarely the only cause. Joint changes, injury, arthritis, sleep problems, and other pain conditions can also contribute.

Should I wear a mouth guard for TMJ pain?

A professionally assessed splint may help some people, especially if tooth grinding is damaging the teeth. It does not help every TMD. Stop using it and seek review if it increases pain or changes how your teeth meet.

Can TMD cause headaches or ear pain?

Yes. Pain from the jaw muscles and joint may spread to the temple, ear area, face, or neck. However, headaches and ear pain have many possible causes, so new or unusual symptoms should not automatically be blamed on TMD.

Sources

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