

# Temporomandibular Joint Dysfunction

## What can massage do for TMJD?

Your masseter muscle is your primary chewing muscle — not the only one, but the main one — and it covers the sides of the jaw just behind the cheeks. It's also the main muscle that clenches your jaw and grinds your teeth, unfortunately, and it's one of the most common locations for trigger points in the entire human body. It is an accomplice in many cases of bruxism (that's Latin for "grinding your teeth") and temporomandibular joint syndrome (a painful condition of the jaw joint), and probably other unexplained painful problems in the area — it will be either a contributing factor or a complication.

### **The Masseter Muscle is Strong and Special:**

Not only does the masseter muscle probably harbour the most common trigger points in the human body, the masseter is also the *strongest* muscle in the human body (pound for pound), although many variables make this difficult to be sure of. Together with the temporalis muscle and a few other smaller muscles, most people can generate at least 150 pounds of force (lbf) between their teeth. For contrast, the

world record for human bite strength is 975 lbf. More than six times normal. A human shark!

Muscles might all seem similar, but it's amazing how specialized they can be. The masseter gets extraordinary strength from a "multipennate" arrangement of fibres that's like a complex feather — fibres converging diagonally on several internal tendons. This feathered arrangement favours torque over speed, making the masseter a very "low gear" muscle, slow but powerful and efficient, lots of chewing bang for your masseter buck. The physics details are a bit mind-bendy.

### **Why is the masseter muscle a perfect spot for massage?**

It's easy enough to imagine why this muscle might enjoy the occasional massage. Whose jaw isn't a bit tense? But the masseter's potential to wreak havoc — and its need for therapy — is often underestimated by everyone, both patients and professionals. (Although I'm pleased to see a surprisingly strong interest in the subject amongst *dental* specialists.) When irritated, masseter muscle knots can cause

## **Symptoms of TMJD**

Most massage therapists have likely had clients with temporomandibular joint (TMJ) dysfunction as 65% to 85% of Americans experience symptoms during their lives. Symptoms include pain and muscle spasms in the head, mandible, neck and shoulder muscles; headaches; earaches; clicking noises or deviations when the mandible moves; limited ability to open the mouth; and dizziness. Causes of TMJ dysfunction include whiplash, bruxism, malocclusion, anxiety, stress, trigger points and postural dysfunction.

and/or aggravate several problems:

*Headaches*, of course — this makes strong intuitive sense to most people. There seems to be a pretty strong connection between tension headaches and jaw clenching. This is partly due to the temporalis muscle, which is reflexively massaged by everyone with a headache. But the masseter is often neglected, even though it is by far the more powerful jaw muscle. They really both need some attention — massaging above and below the cheekbone.

*Earaches* and *toothaches* — which are much less obvious. A masseter trigger point can radiate pain directly into a tooth. Travell and Simons quip, “This can lead to disastrous results for an innocent tooth.” I once suffered a dramatic case of a “toothache” that was completely relieved by a massage therapist the day before an emergency appointment with the dentist: a particularly vivid experience, which originally got me interested in trigger points.

*Tinnitus* (ringing in the ears) and *dizziness*. Both can be serious and complex problems, and are definitely *not* necessarily caused by masseter trigger points. There

are *many* other potential contributing factors and causes of these conditions — but the masseter is one of the possible causes that should be considered.

*Bruxism*, or grinding and cracking of molars.

*Temporomandibular joint syndrome*, which is a slow, painful failure of jaw joint function.

As you can see, masseter problems are not to be taken

Fortunately, it’s easy to massage and soothe your own masseter muscle. It has both great needs *and* it’s unusually easy and satisfying to self-massage. The masseter muscle “hangs” from the underside of the cheekbone on the side of the face. The bottom of the muscle attaches to a broad area on the side of the jawbone. The perfect spot is conveniently located in a notch in the cheekbone, about one inch in front of your ears. The notch is on the underside of the cheekbone, it’s easy to find, and your thumb or fingertip will fit into it nicely, unless you have freakishly large hands. If you press firmly inward and upwards with your thumb in the cheekbone notch, you will usually be rewarded with a sweet ache.

lightly.

### **Two tricks for learning to relax your jaw**

Does anyone go to the dentist anymore and *not* get a prescription for a mouth guard? Judging by the inevitable prescriptions, apparently everyone has some kind of jaw-clenching problem. I do not know if this is actually the case, and sometimes I feel suspicious that the problem is greatly over-diagnosed (because selling mouth appliances is probably profitable). Then again, many people (including

my wife) have actual cracks in their molars from clenching so hard — and it’s kind of hard to argue that there isn’t a problem there!

This article is mostly about *massaging* the masseter in just the perfect spot, but it’s obviously potentially extremely helpful for temporomandibular joint syndrome, bruxism, clenching, and grinding if you can *also* figure out how to relax your jaw. But this is not easy. A nice massage (or any other relaxing experience) is a helpful start, but it doesn’t do much for long. And simply *willing* yourself to stop clenching seems almost completely

I’ve known many people who have tried to get serious about reminding themselves to stop clenching, using egg timers and so on ... with rather

underwhelming results.

So what can you do? How can you possibly learn to clench less? Here are two ideas that I think work better than simply “trying hard” not to clench:

*The Fake Drunk* — *Slur your speech as though you are so sleepy that you can hardly form words.*

*The Long Surprise*: *Spend long periods of time with your jaw wide open. Hold your mouth open at least wide enough to fit a finger between your teeth for one full hour.*

