

Myofascial Pain Syndrome

For patients and families

Read this brochure to learn more about:

- what causes myofascial pain syndrome
- ways to treat it
- what to do to prevent new trigger points



What is myofascial pain syndrome?

Myofascial pain syndrome is myofascial pain that lasts a long time.

- Myofascial pain or “soft tissue pain” is a type of muscle pain. It affects the muscle fibres (muscle cells) and the fascia (connective tissue that covers muscles).

Myofascial pain syndrome may affect:

- a single muscle or a muscle group (such as the chest, back, leg)
- one or more areas of the body

What causes myofascial pain?

Normally your muscles contract (get tight or tense) and relax as you move. But sometimes part of your muscle can contract and stay contracted. The muscle part that stays contracted is called a trigger point or a “knot” in your muscle. Having a trigger point is what causes myofascial pain.

When a muscle has several trigger points it becomes a taut band (a group of muscle fibres that are contracted along the muscle). A taut band feels like a tight rope under your skin.

What causes myofascial pain syndrome?

Myofascial pain syndrome can be caused by many things. It can be caused by your circumstances, such as:

- Staying in the same position for a long time
- Doing the same movements over and over
- Exercising the muscle too much
- Having weak muscles
- Straining your muscle from using it too much (for example neck or shoulder strain after working at a computer for a long time)
- Being cold on part or all of your body (for example when sitting next to an air conditioner)

It can also be caused by health conditions, such as:

- Having an injury (whiplash)
- Having a medical condition that affects your whole body (dehydration, metabolic imbalances)
- Having hormonal changes (for example during post-menstrual syndrome or menopause)
- Being on bed rest for a long time
- Feeling nervous or stressed

How is myofascial pain syndrome diagnosed?

Myofascial pain syndrome is diagnosed by having a physical exam by your doctor. There are no tests that can diagnose myofascial pain syndrome.

Understanding Trigger Points

How do trigger points affect muscles?

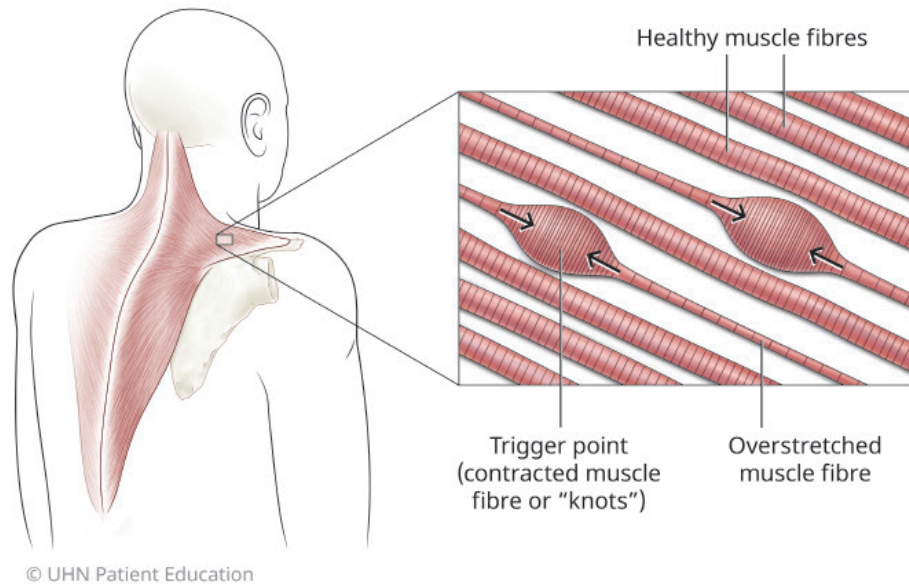
Muscles need to have good blood flow to be healthy. Good blood flow helps muscles by:

- bringing oxygen and nutrients to the muscle
- taking away substances that the muscle doesn't need (cellular waste products)

Having a trigger point restricts how much blood flows through the muscle. At the trigger point, the muscle:

- won't get enough oxygen and nutrients.
- will be difficult to relax. Muscles need oxygen to relax.
- will collect cellular waste products that would normally get taken away

The rest of the muscle will get pulled and overstretched.



What does a trigger point feel like?

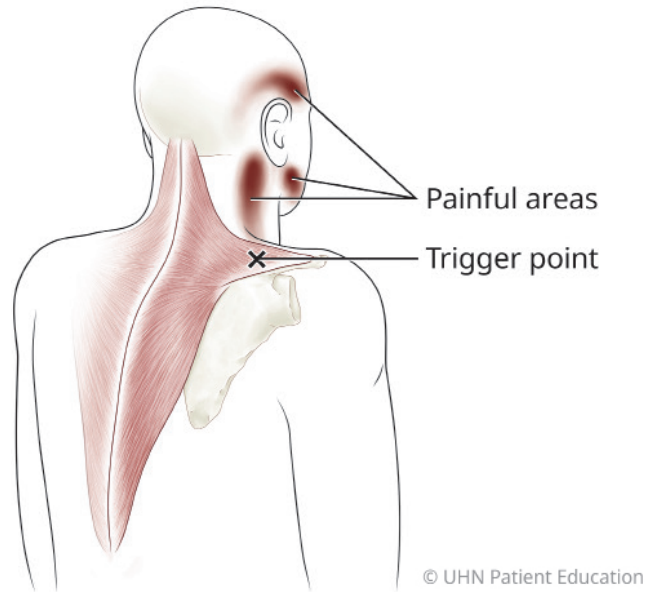
The trigger point may hurt:

- when using the muscle for regular activities. This is called an active trigger point.
- only when the muscle is touched or pressed. This is called a latent trigger point.

Healthy muscles do not hurt when you use, touch or massage them.

Why do I feel pain in other places?

Sometimes a trigger point can cause pain somewhere else in the body, called "referred pain". Relaxing the trigger point will lessen the pain you feel in these areas.



For example, a trigger point below the ear at the base of the neck may cause pain:

- up the neck and behind the ear
- on the jaw
- on the temple

Treating Myofascial Pain Syndrome

Moving is the most important part of treating myofascial pain syndrome. Your health care team will support you by:

- doing treatments that will lessen your pain for a short time
- suggesting activities you can do to help relax your muscles

Treatments from your health care team are not enough to make myofascial pain syndrome go away. You must move and do activities regularly for the pain to lessen or go away.

Remember: you need to move your muscles for the pain to lessen. Keeping your muscle still when it hurts will make the pain worse over time.

How is myofascial pain syndrome treated?

There are 2 parts to treating myofascial pain syndrome:

1. Making changes to prevent getting new trigger points. This will prevent your pain from getting worse.
2. Doing things to relax existing trigger points. This will lessen the pain you already have.

It is important to treat myofascial pain early. Myofascial pain can spread to other areas of the body when it is not treated.

Make changes to prevent getting new trigger points

There are things you can do to prevent getting new trigger points.

- ✓ Be active every day, throughout the day
- ✓ Use good posture
- ✓ Use proper lifting and carrying techniques
- ✓ Adjust your workstation so your muscles aren't strained when doing regular activities (ergonomics)
- ✓ Do gentle stretching every day
- ✓ Build muscle strength
- ✓ Avoid carrying heavy bags. Use both shoulders if you must carry heavy bags.
- ✓ Drink 6 to 8 cups of fluid every day

Do things to relax existing trigger points

Moving is the best way to relax trigger points. Find ways to move your body regularly throughout the day.

Be careful not to do things that hurt your muscles more, such as making sudden movements or using your muscles too much. Do gentle movements and give yourself time to rest.

Do aerobic exercise 5 days a week

Doing aerobic exercise regularly will help relax your existing trigger points.

Aerobic exercises are activities that get you to breathe faster, such as:

- swimming
- walking
- biking

Choose an aerobic exercise that does not make your muscles hurt more.

Doing aerobic exercise gets your heart pumping faster and your blood flowing stronger. A stronger blood flow gets more blood flowing through the trigger point. This will bring more nutrients and oxygen to the muscle and take away the cellular waste products.

To get started doing aerobic exercise, do 30 minutes of aerobic exercise 3 days each week.

- You can do 10 minutes of exercise at 3 different times in the day instead of doing 30 minutes of exercise all at once.

Slowly increase the time you spend doing exercise until you are doing aerobic exercise for 30 to 60 minutes a day on 5 days each week.

Do gentle stretching several times a day

Doing gentle stretching several times a day will help relax your trigger points.

Your doctor or physiotherapist will show you how to stretch your trigger points. Do these stretches several times a day, as directed by your therapist. Usually we recommend 2 to 4 times a day.

Be gentle when stretching your muscles. Forcing a stretch may tear the muscle fibers and make the trigger point worse.

Do activities that help you relax every day

Do activities that help you relax and let go of stress every day.

Some examples of activities that may help you relax are:

- meditating
- doing yoga
- doing Tai Chi
- gardening
- reading a book
- taking a warm bath. Add Epsom salts to the bath water to help your muscles relax more.

Build your muscle strength

Building your muscle strength can help myofascial pain that is caused by weak muscles. You can build muscle strength by doing resistance training exercises, such as lifting weights or using exercise bands.

Do not do resistance training exercises when your muscles are very painful or tender. It can make your pain worse. Wait until the pain lessens before doing resistance training exercises.

Ask your doctor or physiotherapist for advice on what resistance training exercises to do and how often to do them.

Get treatments to lessen your pain for a short time

Some trigger points need more help to relax. There are treatments you can do to get some relief if doing exercise and moving aren't enough.

- Put heat on the muscle (heating pads, hot water bottles, saunas)
- Roll a foam roller or tennis ball over your muscle to massage the area
- Get a massage (registered massage therapy) or massage yourself
- Take pain relief medicine. Ask your doctor or health care team what medicine is best for you.
- Have treatments from a health care provider (e.g. physiotherapist, chiropractor), such as:
 - myofascial release (a therapist massages and stretches the area)
 - muscle stripping (a therapist stretches the muscle and fascia to get blood flowing through the area)
 - dry-needling (a therapist inserts a special needle into the trigger point to relax the area)
 - trigger point injections (medicine is injected into the trigger point)

These treatments will lessen your pain for a short time. You need to move and do exercise to lessen the pain over time.



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