

Occupational Therapy for Trigger Thumb



What is Trigger Thumb?

A condition that affects the tendons in your thumb, leading to pain, snapping or locking (trigger sign) when you are moving the affected thumb.

Tendons connect the muscles to bones for controlling the movements of the thumb and fingers. When you move your thumb, the flexor tendon slides through a tight tunnel (pulley) that keeps the tendon close to the bones (Fig. 1). The flexor tendon can get irritated as it slides through the tunnel. In trigger thumb, the tendon thickens and a nodule may form, making sliding through the tunnel difficult. This leads to pain and the trigger sign (Fig. 2) upon movement.

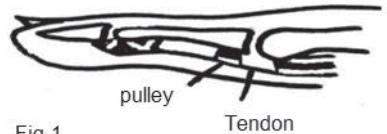


Fig 1.



Fig 2.

What causes Trigger Thumb?

The cause of trigger thumb is not fully understood at this point. It may be the result of:

- Doing activities that involve excessive repetitive grasping / pinching
- Maintaining firm grip of the hand with tools for prolonged periods of time (e.g. when using screwdrivers or power drills)
- Changes of connective tissue as associated with rheumatoid arthritis, gout, or diabetes
- Hormonal changes experienced during pregnancy

The role of Occupational Therapy

Your occupational therapist aims to assist you in improving your ability to perform daily tasks by:

- Fitting you with custom-made splints to rest the affected thumb
- Educating you on activity modification techniques to allow rest and recovery of the affected thumb
- Teaching you exercises to facilitate thumb movements



Principles of Activity Modification

Identify and reflect on daily activities that involve awkward thumb positioning or forceful gripping / pinching. You may use the following principles of activity modification to identify solutions which can prevent aggravation of symptoms.

Apply these principles in mopping as a reference:

Mopping

Most effective



1

REMOVE

Use alternative methods to stop doing the task altogether

Use robotic vacuum with mopping function



2

REPLACE

Change the method of performing the task by replacing it with another equipment / tool / method

Spin dry mop instead of using hands to wring dry the mop



3

REDUCE

Reduce the frequency, duration, exertion or awkward positions by changing the method of performing the task

Build up a softer handle on the mop to reduce pressure exerted by the thumb



4

REST

Take regular breaks in between tasks or break tasks up into different parts

Take rest breaks in between rooms when mopping



Least effective

Home Exercise Programme

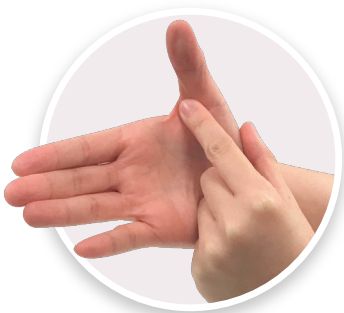
While it is important to apply activity modification principles and use a splint to manage your symptoms, simple thumb exercise will help reduce pain and maintain flexibility of your affected thumb.



Transverse Friction Massage:

- Palpate for nodule at the base of affected thumb
- Massage sideways on the nodule, as tolerated for **3 - 5 minutes, 3 times a day**

As the pain subsides, you can start the following thumb exercises to facilitate tendon motion / gliding, as advised by your occupational therapist.



Do these exercises
10 - 20 times, 3 - 4 times a day.
No triggering should occur
during the exercises.

Passive Ranging Exercises

You should hold at the end range for **10 seconds** with a stretching sensation only.



Keeping the affected thumb relaxed, use the other hand to slowly straighten the affected thumb and pull it backwards.



Keeping the affected thumb relaxed, use the other hand to slowly bend the 1st joint downwards.



Keeping the affected thumb relaxed, use the other hand to slowly bend the thumb into the palm.

Active Blocking Exercises



Using the other hand to support the affected thumb beneath the 1st finger joint, slowly bend and straighten the 1st joint.



Using the other hand to support the affected thumb beneath the 2nd finger joint, slowly bend and straighten the 2nd joint.

Activity Modification



Home Exercise Programme & Splinting



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