

DE QUERVAIN'S TENOSYNOVITIS

Physiotherapy Protocol for Thumb and Wrist Pain



♦ INTRODUCTION

If you are reading this guide, you are probably experiencing **wrist pain** or **pain at the base of your thumb** that is limiting daily activities such as gripping objects, writing, using your mobile phone, or even lifting weights.

The first thing we want to tell you is this:

👉 **You are not alone, and this is a very common condition.**

Many different terms are often used, such as:

- **De Quervain's tenosynovitis**
- **thumb tendinitis**
- **radial wrist pain**
- **irritation of the thumb tendons**

as if they all meant exactly the same thing.

👉 Although these conditions are closely related, there are some important differences.

De Quervain's tenosynovitis is primarily associated with irritation of two important thumb tendons:

✓ **Abductor Pollicis Longus (APL)**

✓ **Extensor Pollicis Brevis (EPB)**

These tendons play a key role during activities such as:

- gripping objects
- lifting the thumb
- moving the thumb away from the hand
- stabilizing the hand during daily activities
- repetitive thumb and wrist movements

When these tissues become irritated or are exposed to more load than they can tolerate, pain may develop along the thumb side of the wrist and at the base of the thumb.

👉 In some cases, there may also be sensitivity or overload within the **thumb carpometacarpal joint (CMC joint)**, located at the base of the thumb.

This area is commonly associated with:

✓ **Thumb Osteoarthritis (Rhizarthrosis)**

Thumb osteoarthritis is a progressive degeneration of the joint at the base of the thumb and differs from De Quervain's tenosynovitis. However, in some individuals, both conditions may coexist and produce similar symptoms.

👉 In practice, these structures often work together, and symptoms can overlap.

For this reason, this protocol has been designed to help people experiencing:

✓ **pain at the base of the thumb**

✓ **radial-sided wrist pain**

✓ **De Quervain's tenosynovitis**

✓ **irritation of the thumb tendons**

✓ **discomfort when gripping objects**

✓ **pain during repetitive hand and wrist movements**

Although it can be frustrating and sometimes persistent, in most cases this is **not a serious injury**, but rather a condition related to the tissues' ability to tolerate load and adapt to movement.

This guide has been created to help you begin a physiotherapy process that is:

- ✓ simple
- ✓ progressive
- ✓ safe
- ✓ based on gradual loading and controlled movement

◆ UNDERSTANDING THE CONDITION

De Quervain's tenosynovitis is related to irritation of the thumb tendons and the sheath that surrounds them, particularly during repetitive gripping movements, thumb lifting, or wrist deviation.

When the load exceeds the tissues' ability to adapt, symptoms may develop such as:

- pain at the base of the thumb
- discomfort along the thumb side of the wrist
- pain when gripping or turning objects
- sensitivity during certain thumb movements
- reduced tolerance to daily activities

👉 This does not necessarily mean that the tissue is seriously damaged. In many cases, it is simply irritated and requires **proper load management** and **appropriate exercise progression**.

◆ IMPORTANT CONCEPT

One of the most common mistakes is:

- ✗ stopping all activity completely
- ✗ or continuing to ignore the pain

👉 The most effective approach is:

- ✓ load management
- ✓ gradual progression
- ✓ specific exercises
- ✓ controlled movement

👉 This allows the tissues to progressively adapt and improve over time.

♦ HOW TO USE THIS PROGRAM

👉 This is not a random collection of exercises.

It is a physiotherapy-based protocol designed to:

- ✅ reduce pain
- ✅ improve the load tolerance of the thumb and wrist
- ✅ restore mobility and control
- ✅ improve tolerance during daily activities

Perform the exercises calmly, without forcing the movement, and always maintain good control throughout the exercise.

♦ FREQUENCY

👉 Perform the program **2–3 times per week for approximately 1 month.**

- **slow and controlled execution**
 - **movement quality before quantity**
 - **consistency is key** 🗝️
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♦ WHAT YOU MAY FEEL

During the exercises or several hours afterward, you may notice:

- **mild discomfort**
- **a feeling of tension**
- **moderate sensitivity around the thumb or wrist**

👉 In many cases, this is completely normal.

⚠ The most important thing is to avoid:

✗ **intense pain**

✗ **a significant increase in symptoms**

✗ **persistent irritation lasting many hours**

👉 If this occurs, temporarily reduce the load, resistance, or intensity of the exercises.

♦ **WHAT TO EXPECT**

Improvement is usually not immediate.

The recovery process requires:

- time
- repetition
- gradual progression
- progressive tissue adaptation

👉 With consistency, most people will notice a gradual improvement in their symptoms over time.

📈 After the first month, you should begin to notice:

- less pain
- better tolerance to daily activities
- improved confidence when using your hand and thumb

⚠ **BEFORE YOU START**

👉 Work with mild to moderate discomfort, not with intense pain.

A small amount of discomfort during exercise is often acceptable and may be part of the recovery process.

However:

✅ tolerable discomfort can help improve the tissues' ability to tolerate load

✗ intense pain may increase irritation

✗ avoiding all effort may limit the benefits of exercise

👉 The goal is to find the right balance between movement, loading, and tissue tolerance.

EXERCISES

1 THUMB ABDUCTION ISOMETRIC



Position:

Hand resting on a table.

Execution:

Gently push your thumb outward without performing a large movement, creating resistance with the index finger of your opposite hand.

Apply enough pressure to reach a **mild and tolerable discomfort**.

Sets:

3–5 sets of 20–40 seconds.

👉 Maintain a steady and tolerable contraction.

👉 Avoid generating intense pain.

Why is it important?

This exercise helps reduce pain and activate the thumb tendons without overloading irritated tissues by using a safe **isometric contraction**.

What should you notice?

👉 A reduction in pain during the contraction and throughout the sets.

👉 In some cases, a gradual reduction in symptoms over the following days.

2 ECCENTRIC THUMB ABDUCTION



What does “eccentric phase” mean?

The **eccentric phase** is the part of a movement where the muscle is working while it is lengthening.

👉 In this exercise, the most important part is the **slow and controlled return of the thumb**.

Position:

Hand resting on a table.

Execution:

Slowly move the thumb outward while creating a light resistance with the index finger of your opposite hand, allowing the thumb to gradually win the movement until a mild and tolerable discomfort is reached.

Then, return even more slowly and in a controlled manner over approximately **4–5 seconds**, using the index finger to provide resistance while controlling the movement back to the starting position with the thumb.

👉 The slow return is the **eccentric phase** of the exercise.

Sets:

2–3 sets of 10–12 repetitions.

Why is it important?

This exercise progressively improves the load tolerance and capacity of the thumb tendons and their surrounding tendon sheaths.

What should you notice?

👉 A controlled effort around the thumb and wrist.

👉 Mild and tolerable discomfort may be acceptable.

👉 Over time, improved tolerance during gripping, lifting, and daily hand activities.

3 CONTROLLED RADIAL DEVIATION



Position:

Rest your forearm on a table with your hand hanging slightly over the edge.

Hold a light weight in your hand.

Execution:

Slowly move your wrist upward toward the thumb side.

Then slowly return to the starting position, controlling the lowering phase.

👉 Slow and controlled movement

👉 No compensatory movements

👉 Tolerable discomfort only

Sets:

2–3 sets of 10–15 repetitions.

Why is it important?

This exercise helps improve wrist control and progressively increases the load tolerance of the tissues involved in De Quervain's syndrome.

👉 As your symptoms improve, you may gradually increase the resistance by using a slightly heavier weight.

What should you notice?

👉 A mild muscular effort around the thumb side of the wrist.

👉 Improved tolerance during gripping, lifting, and daily activities over time.

4 GENTLE THUMB MOBILITY AND JOINT DECOMPRESSION

<https://youtube.com/shorts/EAgFsYAWIRo>

Position:

With your hand relaxed, gently hold your thumb near its base using your opposite hand.

Execution:

Apply a gentle upward traction to the thumb, as if you were trying to create a small amount of space within the joint at the base of the thumb.

Then perform small, slow, and controlled movements of the thumb forwards and backwards.

👉 The movement should be gentle and relaxed.

👉 It should not cause intense pain.

👉 Avoid sudden or forceful movements.

Sets:

2–3 sets of 20–30 seconds.

Why is it important?

This exercise may help reduce the sensation of compression and irritation at the base of the thumb, promoting more comfortable movement of the **carpometacarpal (CMC) joint**.

👉 In some cases, pain associated with **De Quervain's tenosynovitis** may coexist with sensitivity or overload in this area, which is commonly seen in **thumb osteoarthritis (rhizarthrosis)**.

What should you notice?

👉 A feeling of reduced stiffness around the base of the thumb.

- 👉 Improved comfort during thumb movements.
- 👉 A gentle decompression or relief sensation within the joint.

5 THUMB EXTENSION AGAINST RESISTANCE



Position:

Rest your hand on a table with the palm facing down, allowing the thumb to hang slightly off the edge and point downward.

Use the index finger of your opposite hand to provide light resistance.

Execution:

Slowly lift the thumb upward while resisting the movement with your index finger, allowing the thumb to gradually overcome the resistance.

Hold the position for **1 second**.

Then slowly return to the starting position over **3–4 seconds**.

- 👉 Controlled movement
- 👉 Avoid compensating with the wrist
- 👉 Tolerable discomfort only

Sets:

2–3 sets of 8–12 repetitions.

Why is it important?

This exercise helps improve the load tolerance of the thumb extensor tendons, particularly the **Extensor Pollicis Brevis (EPB)**, one of the structures most commonly involved in **De Quervain's tenosynovitis**.

It also contributes to improving thumb control and function during daily activities.

What should you notice?

- 👉 A mild muscular effort around the thumb and wrist.
- 👉 Improved tolerance during gripping and thumb movements.
- 👉 Better thumb control during everyday activities.

♦ FINAL MESSAGE

If you have made it this far, you have already taken an important step:

👉 **you are starting to actively take care of your hand and thumb.**

Remember:

- ✅ **there is no need to rush**
- ✅ **there is no need to force the movement**
- ✅ **the body adapts over time**

👉 In most cases, with the right approach, improvement will come.

📊 The most important thing is not for the pain to disappear immediately, but to gradually notice:

- **less discomfort**
- **better mobility**
- **improved tolerance during daily activities**
- **greater confidence when using your hand and thumb**

👉 **Consistency and proper exercise execution are key to achieving results.**

If you do not notice improvement after approximately **one month**, it may be helpful to perform a more comprehensive assessment to rule out other conditions related to the wrist or the base of the thumb.

👉 You can move on to our **Complete Wrist Self-Assessment Program**:

<https://physiocarehub.eu/wrist-pain-and-hand-pain-physiotherapy-assessment-and-exercise-protocol-for-joint-dysfunction-tendonitis-and-nerve-irritation/>

👉 In some persistent cases, when pain does not improve sufficiently with exercise and proper load management, additional treatments such as temporary immobilization, injections, or specific physical therapy interventions may be helpful.

👉 In these situations, we recommend consulting a physiotherapist or healthcare professional.

♦ **SUPPORT**

If you have any questions or need assistance:

✉ support@physiocarehub.eu

👉 **You do not have to go through this alone.**

We are here to help.

Antonio

