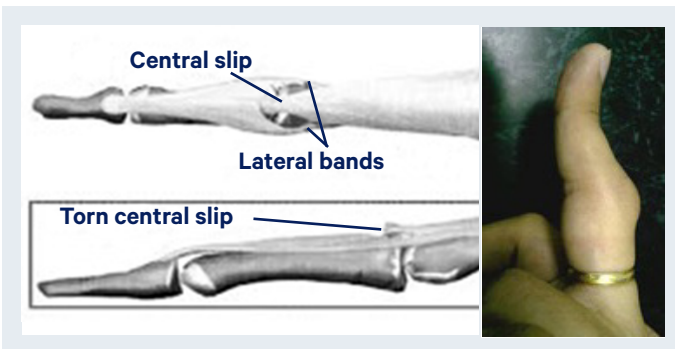


## Closed Central Slip Injury

### WHAT IS A CLOSED CENTRAL SLIP INJURY AND HOW DOES IT HAPPEN?

The central slip is part of the tendon that straightens the small joints in the finger. The tendon can be over-stretched if the finger is forced into a bent position or injured by an impact to the top of the finger. Sometimes a small fracture occurs where the tendon attaches to the bone.

When the central slip is injured the finger does not straighten properly and can develop into a boutonniere 'button-hole' position. If the finger stays in this position the middle joint (PIPJ) can become very stiff.



### HOW IS A CLOSED CENTRAL SLIP INJURY TREATED?

#### Hand Therapy

A central slip injury that is closed, meaning there is no open cut or wound to your finger, is usually treated with hand therapy. Your hand therapist will assess your finger and treatment may include

- Splinting to hold the finger still and protect your finger.
- Management of your swelling.
- Exercises to restore movement and strength to your finger.

If your finger has become stiff, treatment will first focus on being able to fully straighten your finger which may involve casting, splinting, and stretching exercises.



#### Surgery

If there is a cut in the tendon or if there is a large fracture you may need surgery to make sure it heals. Your therapist will tell you if this may be needed.

### WHAT CAN I EXPECT FROM MY REHABILITATION?

For the central slip to heal the middle joint of the finger (PIPJ) needs to be kept straight for 6 weeks. Your hand therapist will make a small plastic splint or cast for your finger. You need to wear this all the time for 6 weeks. You can continue to use your hand for daily activity with the splint in place.

After this, you will start exercises to increase the movement of your finger. The exercises will be progressed slowly to gain movement without re-injuring your finger. You will continue to wear a splint to keep your finger straight between the exercises.

When the tendon is strong enough you will begin exercises to strengthen your hand and finger. You will see your hand therapist regularly to check the splint and exercises.

Your tendon can take 12 weeks to fully heal. You will be able to return to using your finger gradually. Your hand therapist will explain when you can return to particular activities.

#### Do

- Wear your splint.
- Keep your hand elevated if there is swelling in your finger, this will help it heal.
- Follow your hand therapists' instructions about exercises and using your hand.
- Avoid daily tasks that involve any strong gripping or lifting.

#### Do Not

- Remove your splint without guidance from your hand therapist.

### WHAT SHOULD I LOOK OUT FOR?

- Tell your hand therapist if your splint or plaster is too tight or uncomfortable, your splint becomes loose or if it is rubbing on your skin or if you have any numbness or pins and needles.
- If your finger becomes red, swollen and painful you should stop your exercises and book an appointment to see your hand therapist. Elevation and ice may be helpful to reduce swelling.
- If things are getting worse book an appointment to see your hand therapist.



# Merivale Hand Clinic

PHYSIOTHERAPISTS - OCCUPATIONAL THERAPISTS

## Closed Central Slip Injury

### WHAT WILL HAPPEN IF I DO NOT HAVE TREATMENT?

If your tendon does not heal properly you may not be able to use your finger normally. Your finger may become stuck in a bent position. It is easier to treat this condition early, if stiffness develops your treatment will take longer.

### CONTACT DETAILS AND REFERENCES

Your hand therapist is \_\_\_\_\_

Merivale Hand Clinic (03) 3559775

<http://orthoinfo.aaos.org/topic.cfm?topic=a00004>

<http://www.guildfordupperlimb.co.uk/hand/boutonniere-deformity>

Skirven, T. (2002). Hunter, Mackin & Callahan's Rehabilitation of the Hand and Upper Extremity.

<http://www.eatonhand.com/hw/hw004.htm>