

# Exercises after a burn injury of the hand

Physiotherapy Department

**The Plastic Surgery Building**

Castle Street

Glasgow Royal Infirmary

Telephone: 0141 211 5617 page number 3664

Following burn injury to your hand(s) you may experience pain and swelling. This is normal but it may cause problems with everyday activities, such as eating and dressing. This leaflet will give you advice on appropriate exercises following your injury.

It is important to exercise your joints after a burn injury to prevent stiffness and resultant loss of function (being unable to move your hand(s)). If there is damage to the skin near or over a joint it has the potential to become tight and therefore difficult to move. You could develop a contracture where the skin tightens up causing a lack of movement at the joint. This can happen if you do not carry out the exercises. It is always better to prevent a joint contracture developing, rather than treat it once it has occurred.

Your physiotherapist will guide you through the most appropriate exercises.

It is important that you continue these exercises at home until your physiotherapist tells you otherwise.

## **Pain management**

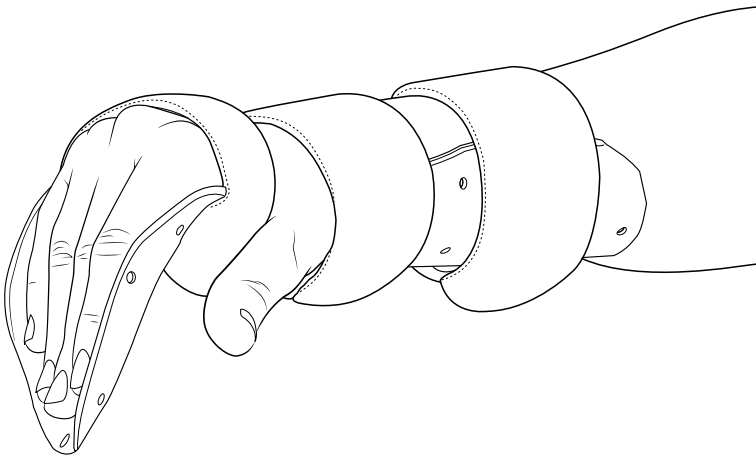
Your exercises may increase your pain as you stretch and move the affected area. It is therefore important to make sure you take adequate pain killers throughout the day to allow you to carry out your exercises effectively.

If your doctor has prescribed painkillers make sure you take them regularly, if you have not been prescribed any pain killers take your normal pain killers (e.g. paracetamol). Do not exceed the recommended dose.

## Positioning for swelling and splinting

As your hands can be swollen it is important that you raise them as much as possible. The ideal position is having your hand above the level of your heart. We may give you a sling to assist with this, try and wear this where possible.

We may give you a splint to help stop your joints tightening up. Your physiotherapist will show you how to wear this.



## Scar massage

Once your burn has healed, use a plain non-perfumed moisturiser cream 2-3 times per day to keep the skin supple. Rub firmly over your scar for around 5-10 minutes. This will help with your stretches and gaining movement in your hand.

## Function

Using your hand for every day activities such as getting dressed and eating will help maintain and improve your movement and prevent stiffness. If you have any hobbies, continue these if you can.

## Exercises

Repeat each exercise every 1-2 hours throughout the day. If you carry them out regularly your joints will improve and be less likely to stiffen.

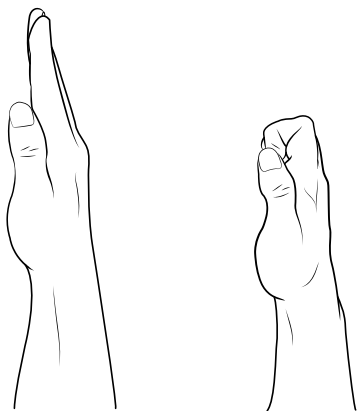
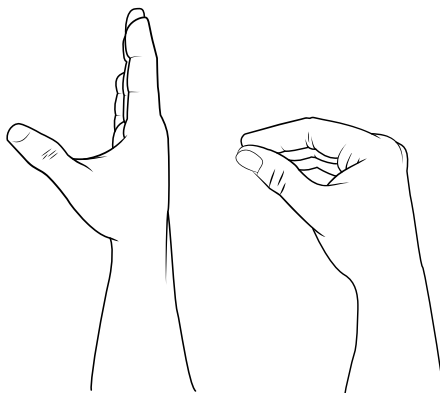
You should carry out these exercises as the wound is healing and even if you still have dressings on your hand.

It is important to start your exercises in the morning as this is when your hand will be at its stiffest. This is because you are not moving whilst you are sleeping. The first few exercises may be painful but this should improve slightly once you get started. This is normal and will not cause you any harm.

Repeat each of the following exercises 10 times every hour:

### Exercise 1

Keep your fingers straight, fully bend and stretch your knuckles to right angles from your palm.



### Exercise 2

Bend your finger tips and middle knuckles only. Then straighten your fingers.

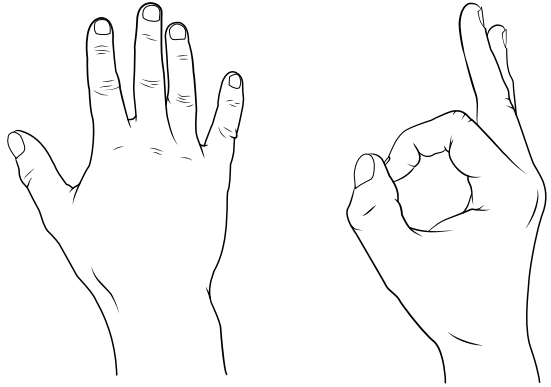
### Exercise 3

Start with your fingers straight. Bend your fingers and make a fist, make sure you tuck your finger tips in tight. Then stretch back out straightening your fingers.

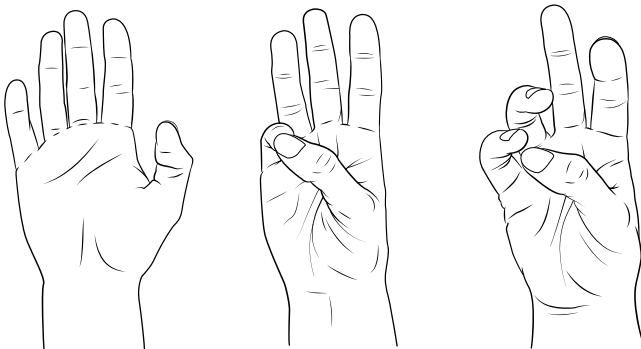


### Exercise 4

Touch the tip of each finger with your thumb.

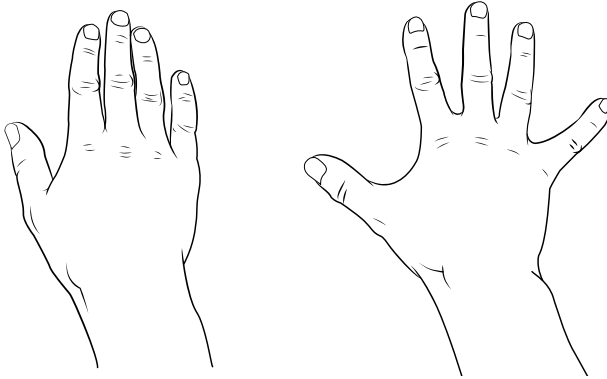


Once you can touch the tip of your little finger, try sliding your thumb down your little finger.



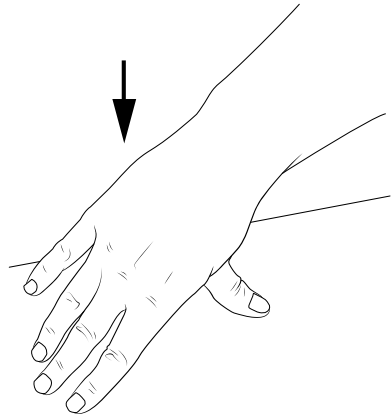
## Exercise 5

With your hand flat on the table, spread your fingers and thumb as far apart as possible.



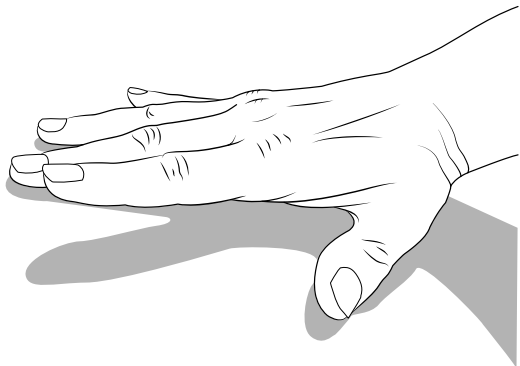
## Exercise 6

Place your thumb and index finger on the table and apply pressure down towards the table until you feel a stretch in your webspace (between your thumb and index finger). Maintain the pressure for a count of 10 seconds.



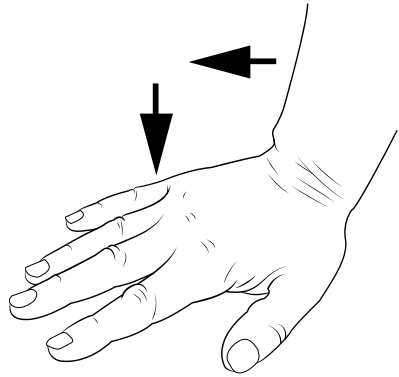
## Exercise 7

Keep your hand on the table. Lift each finger in turn up off the table, and back down again.



## Exercise 8

Stand up keeping your hand flat on the table. Push your arm forward until you feel a stretch at your wrist.



## Exercise 9

Have your forearm on the table with your hand over the edge. Use your other hand to bend your wrist down the way. Hold for 10 seconds.



## After exercising

You will find that once you have completed your exercises your hand will feel looser. It is important to keep your hands moving between sessions or they will stiffen up.

You can stop doing your exercises once it is easy and you have full movement back in your hand.

## **Further information**

This leaflet contains general information on exercises. If you have any questions about the exercises please speak to a physiotherapist. Or contact the physiotherapy department on 0141 211 5617.