

What can I do to reduce contracture?

You have the biggest role to play in reducing the risk of contracture.

Your therapist cannot be with you every moment of the day and this is why it is important for you to understand contractures, learn how to do your stretches yourself and wear your splints correctly. It is not unusual to experience pain/discomfort following a burn injury, however this should not prevent you from exercising.

Appropriate pain relief will make it easier for you to manage the exercises you are asked to do.

Pain when moving does not mean that you are causing damage—in fact, not moving as instructed may cause you more damage in the long run.

If you have any questions relating to contractures, scar tissue or your therapy programme, please ask your therapist or call the Burns Therapy Department to speak to a therapist.

Contact details

Care of Burns in Scotland (COBIS)
National Managed Clinical Network

NHS National Services Scotland
Gyle Square
1 South Gyle Crescent
Edinburgh
EH12 9EB

Website: www.cobis.scot.nhs.uk

Email: NSS.COBIS@nhs.scot

Notes



Scar tissue and contractures

(initial stage)



Information for patients

What is wound contraction and joint contracture?

As grafted or damaged skin heals, the edges of the wound contract to make the damaged area smaller (wound contraction).

Deeper wounds heal by forming scar tissue which shrinks and tightens as it forms.

When scar tissue forms over or near a joint, this “shrinking” (or contraction) pulls nearby tissues inwards.

This tightening can cause movement at a joint to be limited.

If nothing is done to stop the scar becoming tight over the joint, then muscles and other tissues may also get tight.

This can lead to permanent restrictions in movement and is called a contracture.

How does scar tissue behave?

Scar tissue is a bit like cement. In the early stages it may be changed or moved, even though it has already started to “set”.

This is the most important time to start preventing contractures as they are more easily shaped, just like concrete.

Once set, it is extremely difficult to shape or move.

Therefore, it is important to maintain movement and shape the scar tissue before it reaches this point.

Joint contracture can be prevented or minimised through a therapy programme.

Your Physiotherapist or Occupational Therapist will give you advice and instruct you about ways to minimise the formation of a contracture.

Ultimately, however, the hard work is up to you.

Scar tissue tightens 24 hours a day so the more you can do to try stopping the tightening, the less chance you have of a contracture forming.

Though scar tissue may take up to 2 years to mature, prevention is much better than cure.

This can be very hard work over a long period of time, but may mean avoiding further surgery in the future.

Am I at risk of a contracture?

Factors which increase the risk of joint contracture include:

- Burns on or near joints, especially fingers, hands, elbows, armpits, neck, hips, knees, ankles and toes
- Grafted areas or deeper wounds which take longer than 3 weeks to heal.
- Large burns
- Dark-skinned, Asian and red-haired individuals
- Any other current illness that means you find movement difficult

What can my therapist do to reduce contracture?

- Advice and education
- Positioning
- Exercises and stretches

• Splints

• Scar massage (once healed)

Your therapist will teach you exercises specific to your needs and advise you how to do these stretches yourself throughout the day. They may provide you with a combination of treatments to reduce contracture.

Holding the scar in a stretched position, through positioning, exercise or splinting, increases the length of the skin, scar and other soft tissues, such as muscle.

Maintaining the length of these tissues helps prevent joint contracture.

Your stretches should be gently held for 2–5 minutes each and slowly increased as your scar relaxes.

Your therapist will teach you which stretches and exercises are important for you.

Remember that these may be different to other patients.