

Wound and Scar Management for Cardiac Surgery

This leaflet is designed to provide information regarding caring for your child's cardiac surgery site (wound) and the subsequent scar it will leave. For most children the cardiac surgery site will be in the middle of the chest. You may hear the doctors and nurses refer to this as a 'sternotomy'. For a small number of children the cardiac surgery site will be under the arm and will be referred to as a 'thoracotomy'.

Wound care in the early weeks after surgery

Bathing

Your child should not have a bath until all their lines, drains wires and sutures (stitches) are removed (approximately five days or so after surgery). At this time it should be a shallow bath, keeping the chest dry. Sponge the chest around the wound with a well rung out cloth. Pat dry gently.

You can give your child a deep soaking bath/shower (approximately ten days after surgery), when the wound is healed and all the scabs have fallen off.

Drain tube sutures (stitches)

Drain tube sutures should be removed within five days of the drain tube being removed. If the sutures are still in when your child is discharged, the general practitioner, nurse or referring hospital can remove them, unless an alternative arrangement has been made.

Wound care

Generally wound care should not be necessary after discharge from hospital. Should your child need any wound care, the medical and nursing staff will discuss it with you at the time of discharge. Prevent your child from poking at or scratching the wound. Let scabs fall off by themselves.

Contact your general practitioner, Emergency Department, Cardiac Unit if:

- your child develops a **fever** or is generally unwell
- your child's wound becomes **inflamed, swollen** or has any **discharge**
- you think their **pain/discomfort is increasing**

Activity

Chest wounds generally take six weeks to heal. For this period of time your child should avoid:

- contact sports
- excessive physical activities
- lifting heavy objects

In the first six weeks it will be more comfortable for you to 'cradle lift' babies and small children.

Children tend to regulate their activity depending on their comfort and energy levels. You will notice they will have an active time and then stop and rest. Gradually the active time will increase and fewer rests will be needed.

There is no restriction on the position that your child lies/sits in (eg babies can lie on their stomach for 'tummy time'). If your child is uncomfortable they will let you know and you can adjust their position.

Clothing

Anything soft, loose and comfortable (eg cotton interlock) will prevent irritation to the wound.

Scar management

When the wound is healed it is possible to refer your child to a physiotherapist for scar management, should there be any concerns about the scar. Generally, surgical scars heal well and a referral to a physiotherapist will not be necessary.

If you have concerns about the scar or require further information, talk to your child's doctor or nurse. (See the section at the end of the leaflet).

Wound and Scar Management for Cardiac Surgery

What is a scar?

A scar develops from the process of wound repair in the skin. Scarring is a natural part of the wound healing process.

How does a scar mature?

The appearance of a scar changes over time. A scar may initially appear red and thick and is referred to as an 'immature scar'. Over three months to two years scars generally become paler, flatter and softer. Once the healing and remodeling phase is complete, a scar is referred to as a 'mature' scar.

Management of any scar

When the scar is healed and there is no evidence of open areas or scabs:

- a) A mild moisturiser, for example Sorbelene can be applied. A mild moisturiser is recommended to reduce the risk of irritation to the skin. If your child is known to have very sensitive skin it may be best to discuss which moisturiser to use with their doctor.
- b) Gentle massage of the scar can be given. Scars can be tender. A varying level of tenderness, gradually becoming less, may be noted over several weeks. Start with very gentle massage and gradually increase the level of pressure used when massaging, as comfort allows. (The idea is to move the scar and tissue underneath around to soften it). Massage should not be painful.

Precautions

The tissue that makes up scars is not identical to the original tissue and is usually more vulnerable. It is very important that the scar is not exposed to sunlight and avoid sunburn. Please wear clothing that covers the scar, use SPF 30+ sunscreen and stay in the shade when outdoors.

A scar might be considered a problem if it is:

- purple or red for a prolonged period
- feels hard or itchy
- restricts movement (this is very unlikely with cardiac surgery scars)
- raised (you may hear the terms 'hypertrophic' or 'keloid' scar used to describe this). A raised scar may concern you due to its cosmetic appearance.

Predisposition to developing problematic scars may occur:

- in some skin types there may be a tendency to develop raised scars, but this can vary
- when healing of wounds is delayed (three or more weeks) eg following infection

- when there has been a past history of problem scarring (in the patient or family)
- in some areas of the body compared to others

Management of possible problem scars

There are several treatment options that may be appropriate for your child's scar management. Wounds must be totally closed before such therapies become appropriate.

Treatments include:

- massage of the scar
- silicon gel sheeting to help soften and flatten the scar
- sometimes adhesive taping may be used to provide compression

Why would I need a physiotherapist?

Physiotherapists who are trained specifically in scar management are able to provide you with information and appropriate treatment methods.

The aim is to minimise the scar, however it is not possible to completely prevent scar formation.

If you have any concerns about your child's scar:

Please speak to your doctor or nurse about a referral to the scar management physiotherapist.

The first appointment with the physiotherapist should be made for between 4–6 weeks after the surgery. This is when the first indication of any changes in the scar may occur and the wound is well healed.

To make an appointment, ring the Physiotherapy department at the hospital on **9345 5411**. Ask to make an appointment for scar management. You will need a referral form from the ward doctor, cardiologist or surgeon.

Costs

When the referral for scar management is made from inside The Royal Children's Hospital there is no cost for the physiotherapist, but costs may be incurred for any dressings/tapes required.

When a referral is made from outside the hospital (for example from your general practitioner) then there will be a cost for the physiotherapist and any dressings and tapes.

Revised by Lyn Marshall RN CNS, scar management physiotherapists
Lisa Williams and Diane Awcock. Completed November 2010.

The artwork for this leaflet was funded by HeartKids, a support group for heart kids and their families. Visit www.heartkidsvic.org.au