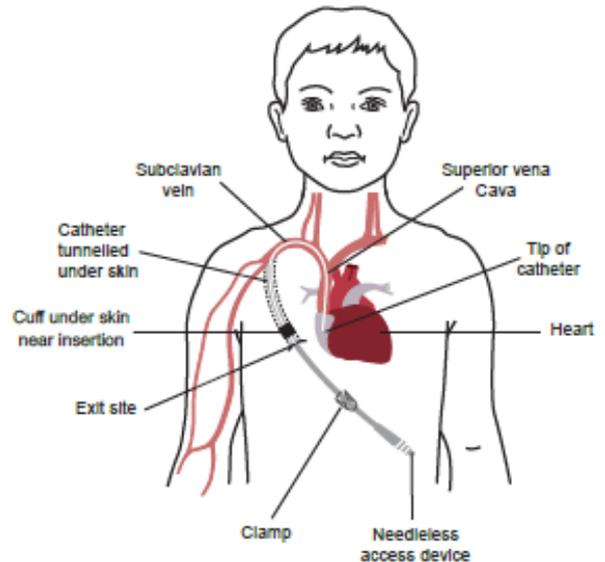


# Central Venous Access

## Care of Tunnelled Lines

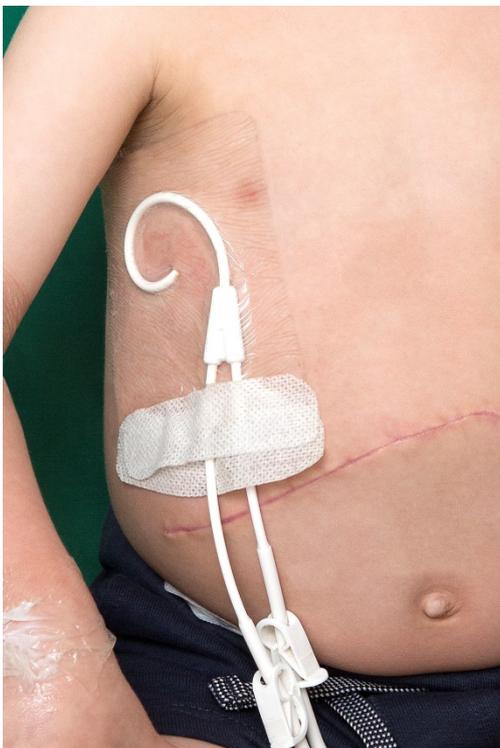
### What is a tunnelled central line?

A tunnelled central line is a type of central venous access device (CVAD). The narrow plastic tube is inserted into a large blood vessel and ends near the heart. The central line is then tunnelled under the skin and exits out of the chest wall or the back. The line is secured by a cuff a few centimetres under the skin. This cuff will eventually (4-6 weeks) grow into the skin which helps to secure the catheter and reduce the risk of infection.



### How is a tunnelled central line inserted?

The procedure is performed under general anaesthetic by a surgeon or radiologist. Fasting is required before this. The procedure usually takes about an hour. An image will confirm catheter tip position prior to use. Afterwards there will be a large clear dressing over the insertion site.



### Why is a tunnelled central line needed?

This device is recommended when the IV treatment that your child needs could cause irritation to smaller veins when given repeatedly for a number of months or even years and allows easy accessibility for blood sampling.

### Are there any complications?

The most common problems associated with this device are blockage of the catheter; infection and movement of the catheter out of position. Most complications can be avoided with good general care and careful observation. Your nurse or doctor will explain what you can do to help prevent these complications and advise you when to seek help when you are discharged home.



### Good general care includes:

- Hand washing – before and after touching or handling the central line or dressing
- Cleaning the bung, or needleless access device, with chlorhexidine antiseptic before and after use
- Keeping the dressing clean and dry. The dressing, tubing and ends of the central line should be covered with a waterproof cover when bathing or showering. Do not let the ends of the catheter sit in bath water. Weekly dressing changes, or sooner if the dressing becomes wet, dirty or loose
- Inspecting the insertion site and skin through the dressing every day and telling your nurse or doctor if the skin appears red, swollen, there is ooze or discharge, or it is painful. The cuff should not be visible
- The central line is flushed before and after giving every treatment to help prevent blockage. It may be necessary to give additional flushes between the planned medicine times
- Check that the connections and bungs at the end of the central line are secure. When the central line is not in use the clamps must be closed. The line clamp should be moved to a different position along the thickened area of the central line each time it is accessed to prevent it becoming kinked or weakened in the same spot
- Protecting and securing the central line to prevent damage. Consider adjusting seat straps, seatbelts and bra straps to avoid pressure on the line. Secure the line to prevent pulling and minimise any dangling of its parts (and risk of it catching/breaking/pulling out)

### Activities

Avoid the following: contact sports; rough play; swimming/submerging the central line in water; heavy lifting as this can increase the risk of the central line becoming damaged or moving out of position.

Young children should be closely supervised when using scissors or sharp objects to avoid accidentally cutting or puncturing the central line.

Young children should be closely supervised to prevent them pulling on the line and causing it to be dislodged.

### When to seek help?

Your nurse or doctor will explain what to look for and what to do if problems occur at home. Contact Hospital in the Home or attend the Emergency Department (ED) if you notice any of the following:

- Your child has a fever or is unusually quiet, irritable or tired/lethargic
- There is ooze around the insertion site, or the skin is red, inflamed or painful
- The cuff is visible or the length of line has changed

- Central line is accidentally pulled out – place gauze with firm pressure over the insertion site, sit your child up, contact ward immediately and return to hospital – see emergency information below, save all parts of the central line for inspection
- There is a break or hole in the central line – clamp the line as close to the insertion site as possible, cover the hole with the sterile dressing provided. Attend ED
- Child complains of aching, swelling or pain in their upper body. Attend ED as soon as possible

#### Call an ambulance if you notice any of the following:

- A sudden change and/or difficulty in breathing, gasping for air
- Your child becomes drowsy, pale or floppy
- Your child complains of chest pain or palpitations

#### Who to contact?

If you have any concerns about your child or have questions related to your child's central line please contact:

- HiTH or PAC patients – 6456 2222
- Oncology & Haematology patients – Parent Advice Line 24 hours a day 0410 717 816
- PCH CVAD Clinical Nurse Specialist - via switchboard during office hours – 6456 2222

**If you notice any of these, clamp the central line as close to the insertion site as able; lay your child on left side with head downwards if possible.**

**Call 000  
Stay Calm**



Government of **Western Australia**  
Child and Adolescent Health Service

**This document can be made available in alternative formats on request for a person with a disability.**

#### **Child and Adolescent Health Service**

15 Hospital Avenue, Nedlands, WA, 6009

Telephone: (08) 6456 2222

Produced by Emergency Department

Ref: 984 © CAHS 2017

**Disclaimer:** This publication is for general education and information purposes. Contact a qualified healthcare professional for any medical advice needed.  
© State of Western Australia, Child and Adolescent Health Service