

FACTSHEET



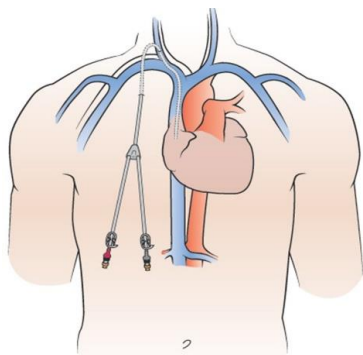
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Uncuffed Tunnelled Central Venous Catheter (CVC)

Your doctor may have talked to you about using a device called an 'uncuffed tunnelled central venous catheter'. This sheet explains how and why they're used.

What is an uncuffed tunnelled central venous catheter?

An 'uncuffed tunnelled central venous catheter' is a plastic tube that is inserted into a large vein in the neck. The tube goes under the skin and comes out onto the chest. The tip of the catheter ends in a big vein close to the heart. This line can stay here for a few weeks or even a month or two depending on the length of treatment. Most of this catheter will not be visible; only a small section of the catheter remains outside the body and will have one or two openings or 'lumens'. This is where the intravenous fluids are attached and medicines are given.



Reasons for insertion

This type of catheter is usually inserted in children for the following reasons:

- Certain medications

- Small/difficult veins
- Parenteral Nutrition
- Long term treatment

How is this catheter inserted?

- Most children need to be asleep to help them keep still for the procedure. This usually means having a general anaesthetic.
- The catheter is inserted by a doctor who has been specially trained.
- The procedure is done in an operating theatre to reduce the risk of infection.
- Local anaesthetic may be injected into the surrounding area to numb the area and reduce pain.
- An X-ray is done after the catheter has been inserted in the operating theatre, to make sure the tip of the catheter is in the correct position and is safe to use.

Potential problems with insertion

- If your child's veins are very small, the line may not go in the first time and a different vein may need to be used. Sometimes the artery next to the vein can get damaged. This heals very quickly but your child may have a small bruise.
- There is a risk of bleeding or oozing around the insertion site in the neck and the exit site in the chest. This usually settles fairly quickly.
- The position of the catheter may not be satisfactory on the X-ray and it may need to be repositioned.

How is this catheter kept in place?

The catheter is secured to your child's chest using a clear dressing and a securement device. The dressing also acts as a barrier to prevent infection and allows the area to remain clean and dry. The securement device prevents the catheter from being accidentally dislodged or removed. The dressing and the securement device must always remain in place.

What is 'flushing' and 'locking'?

- 'Flushing' of the catheter occurs when a normal saline (salt water) solution is injected in the line to prevent it from blocking. This is usually done after medications have been given. It may feel cold or they may have a salt taste, but this is normal.
- 'Locking' refers to when a solution made out of anti-blood clotting agent (heparin or citrate) and sometimes an added antibacterial agent (taurolidine/Taurolock) is left in the line when it is not being used. This is done when the catheter does not need to be used for a period of time.

How is it removed?

Removal of this type of catheter is done as soon as it is no longer needed, such as at the end of treatment, or if there is an unresolved complication or infection. All staff removing the catheter are trained in this task and they follow a very strict protocol. Removal of the catheter can be done in the ward and a general anaesthetic is not necessary.

Possible Problems

Serious problems are very rare and most of the time an uncuffed tunnelled central venous catheter is the best choice for your child. However, it's important to know of the risks involved before you consent to the procedure.

Infection

As with any procedure there is a risk of infection, although we do our best to avoid this by making sure everything is clean and sterile in the operating theatre.

- Signs to look for include redness, pain, heat and swelling over the site where the catheter is inserted.
- Your child might also have a fever or feel unwell. Take your child to the **Emergency Department if they have a temperature of 38°C or more** as the catheter maybe the possible source of infection.
- If the catheter is thought to be the reason for the infection, then the catheter may need to be removed and your child may be given antibiotics.

Damage to the catheter

The part of the catheter outside the body may become damaged with a split or crack.

- You may notice some fluid ooze from the catheter or under the dressing.
- If this happens, the catheter may need to be removed.

Accidental removal

The catheter may be pulled out by mistake.

- If this happens, any fluid or medication running through the catheter should be stopped and the catheter should be clamped.
- Pressure should be applied over the insertion site in the neck and also the exit site in the chest and medical staff informed immediately.

Blockage

A common complication is blockage of the catheter.

- This happens if blood or medication gets stuck in the catheter.
- To prevent blockages the catheter will either have fluid running through it or be locked. All lumens must be flushed and locked weekly if not in use to ensure they remain working.
- A blocked catheter can sometimes be fixed by flushing it with an anti-clotting medicine. Sometimes the catheter is too blocked and needs to be removed.

Air bubbles or 'air embolus'

There is a small risk of air bubbles entering the catheter.

- We make sure that there is no air in the syringes used to inject into the catheter.
- If there is a break or a leak in the catheter it is important to clamp it immediately to prevent air from entering.
- Very rarely there can be serious complications. These can be life-threatening.
- The catheter could damage or puncture the walls of blood vessels or of the heart.
- A serious infection or blood clot could develop.

It is important that you discuss these possible problems with your doctor, as well as all the risks and benefits of the catheter before you consent to the procedure.

Please feel free to talk to your team doctor or doctor inserting the line about any concerns you have. Being informed will help you make the best choice for your child.

Questions

(Write down any questions or concerns you would like to discuss with your doctor/nurse.)