

# FACTSHEET



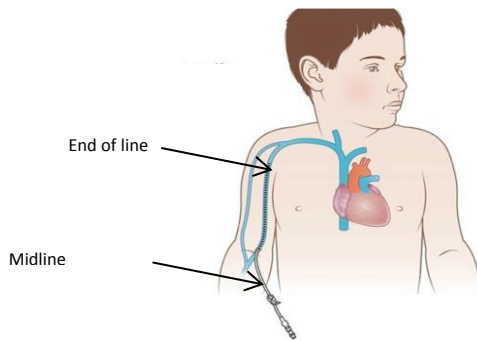
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## Midline

If your child needs medicine to be given over a period of time, your doctor may have talked to you about using a midline catheter. This factsheet describes how and why midlines are used.

### What is a midline?

A midline is a type of catheter or small tube, usually 5-8 cm long that is inserted into a vein in the upper arm up to the armpit.



### Why would my child need a midline?

Midlines are used for intravenous antibiotics, when treatment will go on for more than a week. Some antibiotics are not suitable to be given via a midline and your child may need to have a catheter inserted through the veins of the arm towards the heart (called a peripherally inserted central catheter) instead. This will be discussed with you if it's recommended for your child.

### How is the midline inserted?

- A midline can be inserted while your child is awake as it is a short and simple procedure. Some children may need a general anaesthetic.

- The procedure is done in an operating theatre to reduce the risk of infection.
- The midline is inserted by a doctor who has been specially trained.
- Local anaesthetic may be given in the surrounding area to numb it and make the insertion more comfortable.
- An X-ray is not needed after the procedure.

### Potential challenges with insertion

- Sometimes there is bleeding or oozing around the insertion site. This usually settles fairly quickly.
- It may be difficult to insert the midline. If the procedure is not successful, alternative types of catheter choices will be discussed with you before you provide your consent for midline insertion.

### How is the midline kept in place?

- The midline is kept in place with a clear dressing and a securement device. The dressing covers the midline and keeps it clean and dry to prevent infection. The securement device prevents the midline from being pulled back or pulled out.

### How is the midline removed?

Removal of the midline is done as soon as it is no longer needed, such as on completion of treatment, unresolved complication or if there's an infection. All staff removing midlines are trained in this task. Removal of the line can be done in the ward and is not painful.

### What do they mean by 'flushing' and 'hep locking'?

- 'Flushing' of the midline occurs when normal saline (salt water) is injected in the line to prevent it from

blocking. This is typically done after medications have been given.

- **‘Hep locking’** stands for ‘heparinised saline flushing’. Heparinised saline is a solution made out of anti-blood clotting agent (heparin) and normal saline. Heparinised saline stops the blood from clotting in the line. This is usually done when the midline isn’t going to be used for a period of time.

### Potential midline complications

Serious complications are very rare and most of the time, a midline 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 of infection to look for include redness, pain, heat and swelling over the site where the line is inserted.
- Your child might also have a fever or feel unwell.
- If the infection is thought to be caused by the midline, then the midline may need to be removed and your child will be given antibiotics.

**Damage to the midline:** The part of the midline outside the body may become damaged with a split or crack.

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

**Accidental removal:** The midline may be pulled out by mistake.

- If this happens, any fluid or medication running through the midline should be stopped and the midline clamped.
- Apply pressure over the insertion site and inform medical staff immediately.

**Blockage:** A common complication is blockage of the midline.

- This happens if blood or medications get stuck in the line.
- To try to prevent blockages, the midline will either have fluid running through it or be hep locked
- A blocked midline can sometimes be fixed by flushing. Sometimes the midline is too blocked and needs to be removed.

**Air bubbles:** There is a small risk of air bubbles entering the midline which can cause problems.

- We make sure that there is no air in the syringes used to inject medication of fluid into the midline.

- If there is a break or a leak in the midline it is important to clamp it immediately to prevent air from entering.
- Very rarely serious complications arise. These can be life-threatening.
- The line could damage or puncture the wall of blood vessels.
- A serious infection or blood clot could develop.

It is important to discuss these possible complications with your child’s doctor, as well as all the risks and benefits of the midline before you consent to the procedure.

Please feel free to talk to your child’s team doctor or your anaesthetist 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)

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