

IVs, drips and newborn babies

The Royal Women's Hospital Fact Sheet / www.thewomens.org.au



the women's
the royal women's hospital
victoria australia

Many babies admitted to Newborn Intensive and Special Care (NISC) will have an IV or drip (intravenous vascular catheter). Usually this is because your baby:

- needs antibiotics because there may be an infection
- is not able to be fully fed and still needs intravenous fluids or nutrition.

Venous catheters

Veins are thin blood vessels or tubes that carry blood towards the baby's heart.

Most often, a doctor or nurse places a peripheral IV, a small (two centimetre) plastic tube, through the skin into a vein that can be seen on the hand or foot.

Peripheral IVs are very safe, but will usually only last two to three days as they tend to leak or become blocked. Your baby's nurse will watch very closely for any swelling or bruising and the IV will be removed and a new one inserted if needed. The other main risk of any vascular catheter is infection. This can be reduced if carers are regularly washing their hands and using hand-gel.

If your baby is particularly small or unwell it is more likely that an IV will be needed for longer than just a few days. In this case a central IV line will be used. Central lines are deeper and put into bigger veins by a doctor.

A central line may stay in for many weeks as the risks of leakage and blockage are much less. There are two types of central IVs:

- 1. Umbilical venous catheter or 'Umbi Lines'** are placed by a doctor soon after admission to the NISC. They are put into the vein where the baby's belly button will be and can stay there for 7-10 days.
- 2. Percutaneously Inserted Central Venous Catheter (PICC):** A doctor places a PICC or 'long line' into a vein that can be seen on the baby's elbow, ankle, knee or sometimes, the scalp.

After the doctor places an umbi line or a long line, an X-ray is done to check that the catheter is in the right place.

Central venous lines are also very safe. Complications are rare, but include blockage and leakage (into liver or abdomen, or around lung or heart) and infection. This risk can be reduced

by handling the catheter in a sterile way and with hand hygiene (amongst carers). If there are complications, we usually take the central line out straight away.

Arterial catheters

Arteries are muscular blood vessels or tubes that carry blood away from the baby's heart.

Arterial catheters are placed to watch your baby's blood pressure all the time, and to easily take blood for testing whenever needed. There are also two types of arterial catheter:

- 1. Umbilical (or central) arterial catheter** – which is usually placed by the doctor into the umbilical artery at the same time as the umbi venous line. The position is checked using X-ray.
- 2. Peripheral arterial catheter** – which is a small two centimetre plastic tube that may be placed by the doctor into an artery on the wrist (radial artery) or on the foot (posterior tibial artery).

Arterial catheters are also safe. They are closely watched by your baby's nurse and are quickly removed if there is concern. Complications are rare, and include leakage, blockage and spasm. Very, very rarely, blockage and spasm may result in loss of the tip of a finger or toe – this is a very rare complication, as such close attention is given to the arterial line by all staff. We usually only put arterial catheters in when the baby is very small or very sick, as it reduces how often we need to disturb the baby.

For more information

Your baby's doctor, nurse or care manager are available to answer your questions

The Royal Women's Hospital

Newborn Intensive & Special Care
Cnr Flemington Rd and Grattan St
Parkville VIC 3052

Phone: (03) 8345-3400

Website: www.thewomens.org.au

The Women's is a smoke free hospital. For more information and support visit www.quit.org.au

Disclaimer The Royal Women's Hospital does not accept any liability to any person for the information or advice (or use of such information or advice) which is provided in this fact sheet or incorporated into it by reference. We provide this information on the understanding that all persons accessing it take responsibility for assessing its relevance and accuracy. Women are encouraged to discuss their health needs with a health practitioner. If you have concerns about your health, you should seek advice from your health care provider or if you require urgent care you should go to the nearest hospital Emergency Department. © The Royal Women's Hospital, May 2008