



# IVS, DRIPS AND NEWBORN BABIES

Many babies admitted to Newborn Intensive Care Unit (NICU) will have a catheter (also called an IV or drip). Usually this is because your baby:

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

## Catheters in veins

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

Most often, a doctor or nurse places a short catheter, through the skin into a small vein on the hand, arm or foot.

These short catheters are very safe. They 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 catheter will be removed and a new one inserted if needed.

The other main risk of any catheter is infection. This can be reduced if carers are regularly washing their hands and use hand-gel.

If your baby is particularly small or unwell it is more likely that they will need a catheter for longer than just a few days. In this case a long catheter will be used so that it can go deeper into a vein. Long catheters are put into bigger veins by a doctor or nurse practitioner.

A long catheter may stay in for many weeks as the risks of leakage and blockage are much less.

We use two types of long catheters in NICU:

1. Umbilical venous catheter or 'Umbi Lines' are placed soon after admission to the NICU. 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 PICC or 'long line' is inserted into a vein on the baby's elbow, ankle, knee or sometimes, the scalp.

After the doctor or nurse practitioner insert a long catheter, an X-ray is done to check that the catheter is in the right place.

Long catheters 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 catheter out straight away.

## Catheters in arteries

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

Catheters are sometimes inserted into arteries 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 arterial catheter- a long catheter which is usually placed into the umbilical artery at the same time as the umbilical venous catheter. The position is checked using X-ray.
2. Peripheral arterial catheter – a short catheter which is a small two-centimetre plastic tube that may be placed 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 blood tests.

### For more information

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

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