

Norfolk, Suffolk & Cambridgeshire



Neonatal Network

Parent Information: Peripheral Arterial Lines

What is an arterial line?

This is a thin tube that is placed into an artery carrying blood from the heart to the body, which can be used instead of a needle to take samples of blood from a baby.

What is the arterial line use for?

- To take samples blood for tests including blood gas analysis (e.g. oxygen and carbon dioxide).
- To monitor blood pressure.

Where does this line go?

For newborn babies we prefer to put the line in the umbilical artery, which is in the umbilical cord. If this is not possible we may use the arteries near the wrist or ankle. These are called peripheral arterial lines.

What are the risks associated with an arterial line?

With all arterial lines there is a risk of complications. The main risks are:

- Bleeding
 - Clotting of the artery
 - Spasm of the artery
 - Infection.
- } both of which may interfere with the flow of blood to the fingers or toes

The nursing staff that care for your baby are vigilant and keep a close eye on your baby's circulation and the arterial line. If any changes occur they will respond immediately. The line will be removed if a complication occurs.

Will it hurt my baby to have this line inserted?

There will be some discomfort from having the line inserted as a needle is used. The doctor will assess whether your baby needs pain relief before starting the procedure.

How long will the line stay in?

The line will be removed if it is no longer needed.

Will there be any complications when the line is removed?

There may be a little bleeding when the line is removed but the nurse/doctor will pressure to minimize the bleed. The site might be a little tender after the tube comes out. If the line has been removed because of concerns about the colour of the fingers or toes, the circulation usually returns to normal after the line is removed.

More questions?

If you have any questions or concerns, please ask the doctors or nursing staff.

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