

Patient information

Critical Care Arterial Line

Critical Care Department

This leaflet is one of a series of leaflets which explain procedures commonly performed in the critical care department.

If you have any concerns or would like further information about any procedure performed in critical care, then please ask a member of the medical staff who will be pleased to discuss this with you.

What is an arterial line?

An arterial line is a thin plastic tube inserted into an artery (blood vessel) to accurately and continuously measure the patient's blood pressure.

The arterial line (sometimes referred to as an art line) also allows us to take regular blood tests without having to insert multiple needles into the patient.

How is the arterial line inserted?

- Insertion of the arterial line is performed under sterile conditions to prevent infection risks to the patient.
- A local anaesthetic injection is given to the patient to reduce any discomfort that the patient may feel whilst the procedure is being performed.
- The doctor inserts the plastic tubing using a thin guide wire to ensure that the blood vessel is not damaged in the process.

Where is the arterial line sited?

Commonly, arterial lines are sited (placed) in the wrist, groin or the feet.

Very rarely an arterial line may be inserted into the armpit or the elbow.

Once the line is inserted, it is secured in place with a stitch and a dressing.

How long does the arterial line stay in place?

Arterial lines usually stay in place for one to two weeks. Occasionally, they may not work perfectly and have to be changed sooner.

Lines are reviewed on a daily basis and they are removed as soon as they are not essential for the safe care of the patient.

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What are the risks of an arterial line?

As with any procedure, there are risks associated with an arterial line.

Arterial lines carry a small risk of bleeding and infection.

Rarely, the arterial line may cause damage to the blood vessel, cause an abnormal swelling of the blood vessel (known as an aneurysm) or reduce blood flow to parts of the limb.

These complications may require surgery to correct them.

To reduce these risks, arterial lines are constantly monitored by nursing staff for any complications.

Feedback

Your feedback is important to us and helps us influence care in the future.

Following your discharge from hospital or attendance at your Outpatient appointment you will receive a text asking if you would recommend our service to others. Please take the time to text back, you will not be charged for the text and can opt out at any point. Your co-operation is greatly appreciated.

Further information

For further information please contact below

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