

Patient information factsheet

Having a midline insertion

We have written this factsheet as a guide to having a midline insertion. We hope it will help to answer some of the questions you may have. If there is anything you do not understand, a member of your healthcare team will be happy to explain further.

What is a midline?

A midline (also called a midline catheter) is a long, thin, flexible tube that is inserted into a large vein in the upper arm. It is used to safely administer medication into the bloodstream, similar to a cannula (a small tube that is inserted into a vein, usually in the back of your hand or arm).

A midline can stay in place for approximately four weeks (28 days) if required. However, some people do require replacement catheters.

Why do I need a midline?

Your reason for having a midline will depend on your medical condition and your treatment plan.

A midline can be used to give treatments, such as:

- antibiotics
- fluids
- intravenous (IV) treatment at home

What are the benefits of a midline?

A midline can make treatment more comfortable by:

- reducing the irritation that certain drugs can cause to smaller veins
- preserving the health of your vessels
- preventing the need for multiple needle punctures

Midlines are particularly helpful for people who:

- are anxious about needles
- have veins that are small or very difficult to find

How should I prepare for the procedure?

You can eat and drink as normal before the procedure.

Before the procedure, we will explain the risks and benefits of having a midline insertion, and give you a chance to ask any questions. We will then ask you if you are happy to go ahead with the procedure.

Where will the procedure take place?

We will perform the procedure in hospital by your bedside or in a procedure room.

What will happen during the procedure?

A midline insertion is not an operation. It is a simple, sterile procedure that takes approximately 20 minutes.

We will use an ultrasound machine to find a suitable large vein in your upper arm. We will then clean your arm and cover it with a sterile drape. We will then numb a small area of your arm with a local anaesthetic injection (this may sting briefly before it takes effect).

When the small area of your arm is completely numb, we will insert the midline through a fine needle into the large vein in your upper arm. You should not experience any pain during this part of the procedure. We will then guide the midline further into your vein until the tip (where the medication enters the bloodstream) sits within the large vein just below your armpit. Once the midline is in the correct place, we will remove the needle.

A small section of the midline will remain outside of your body. We will attach this section to your upper arm using a clip (called a Statlock) and clear, adhesive dressing to hold it in place.

What will happen after the procedure?

Once the midline has been fixed in place, we can begin to administer medication.

Are there any risks or complications?

Insertion

It can sometimes be difficult to find a suitable vein or to get the midline into the correct position. If this is the case, we may have to insert the midline into a different vein or discuss alternative options with you.

Infection

It is possible for an infection to develop inside or around the place where the midline goes into the vein (this is called the insertion site). Contact your healthcare team immediately if you experience any of the following symptoms:

- pain, redness or swelling at the insertion site
- discoloured fluid coming from the insertion site
- a fever or chills

Blood clots (thrombus)

It is possible for a blood clot to develop around the midline. If this occurs, we will give you medication to dissolve the clot and we may need to remove the line. Contact your healthcare team immediately if you experience any of the following symptoms:

- pain, swelling, discomfort or redness on the side of the insertion site

Vein inflammation (phlebitis)

Occasionally, the midline may irritate the vein wall, which can cause pain and redness along the length of the vein. If this occurs, use a warm compress to encourage good blood flow around the midline. If you have any concerns, please contact your healthcare team.

Bruising or bleeding

It is common to experience some bruising or bleeding at the insertion site. Please inform us of any blood thinners you are taking before we insert the midline, as this can increase your risk of bleeding.

A break or split in the midline

It is important that the midline is not broken or cut. Do not use scissors near your midline.

It is rare for a midline to break or split, but if it does happen, contact your healthcare team immediately. The line may need to be removed, repaired or replaced.

A dislodged midline

Review your midline once a day to measure how much of the line is out of your skin. The original length of the line can be found in your information pack. If the external part of the midline changes length, please contact your healthcare team.

Damage to surrounding tissues or vessels (nerves and arteries)

We will minimise these risks by:

- cleaning the skin around the insertion site with antiseptic solution
- using sterile drapes and equipment
- using ultrasound guidance to locate the vein (this allows us to avoid nerves and arteries)
- discussing activities to avoid (to prevent clot formation)
- inserting the midline away from the joints (to reduce the movement of the line in the arm)

If you are not sure who to contact out of hours, please check with your healthcare team.

How can I look after my midline?

It is very important to take care of your midline to help prevent problems occurring.

You should flush your midline every day using a firm 'push pause' technique.

You should change your dressing within the first 24 hours of the midline being inserted to remove the gauze and then weekly thereafter (or sooner if the dressing starts to peel off, gets wet or gets dirty).

A midline should not stop you carrying out day-to-day activities. However, please speak to your vascular access specialist before starting activities that are manual or involve repetitive motions, such as lifting weights, playing golf, fly fishing, painting or knitting.

Do:

- always keep your midline clamped when not in use
- keep the midline insertion site dry and use a waterproof cover or 'cling film' when washing
- always wash your hands before handling your midline

Do not:

- submerge the midline under water
- swim
- undertake repetitive motions

Who should I contact if I have any concerns?

Contact your healthcare team immediately if you think something is wrong, or if you experience any of the following symptoms:

- pain, redness, oozing or swelling around the insertion site (these can be signs of an infection, blood clot or inflammation)

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- bleeding from the insertion site (if this happens, apply pressure, raise the arm and wrap with a firmly wound bandage. The bleeding should stop but you will need to have a new dressing)
- an increase in the length of the tube that is on the outside of the arm (do not remove the midline)
- a high temperature (above 37.5°C), fever or chills (these can be signs of an infection)
- pain or difficulty when flushing the midline or leaking from the midline (if this happens, stop using the midline and contact your healthcare team for a review)

When will my midline be removed?

When your treatment has finished, the midline can be removed. This is a simple, quick and painless procedure, and is normally performed by a nurse. They will remove the dressings, gently pull out the line, clean the removal site and cover it with a clean dressing.

Contact us

We hope this factsheet has helped to answer some of your questions. If you have any further questions or concerns about your midline or its care, please ask the nurses or doctors looking after you.

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