

What to expect when having a

# Tunnelled Central Venous Catheter Insertion

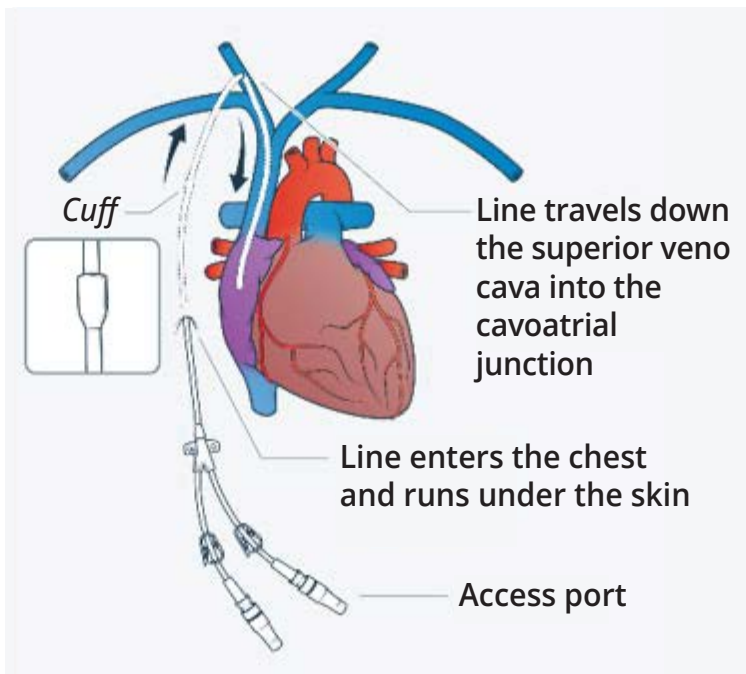
Clinical Team Contact numbers; \_\_\_\_\_



## What is a Tunnelled Central Venous Catheter?

A Tunnelled Central Venous Catheter (tCVC) is also known as a **catheter** or **line**. Throughout this leaflet we will refer to it as a catheter. The catheter is a soft flexible hollow tube that we insert under the skin and then place in a large vein with the catheter tip at the heart. Usually we use the veins of the neck however, we can also place it in a vein in the groin.

The catheter will come out of the skin over your chest or thigh. We call this the exit site. A small cuff at the end of the catheter underneath the skin helps stop the catheter coming out and helps prevent infection. We can use the catheter to give you medicines or treatments such as antibiotics, chemotherapy, fluids or kidney dialysis. The catheter can have one or two extensions, the extensions are known as access ports. Each access port is covered by a special bung or a needle free device, which will be replaced by a nurse or doctor.



## **Who will do it?**

A specially trained nurse or doctor.

## **Where will it be done?**

In the x-ray department, a treatment room or an operating theatre.

## **How long will it take?**

This can vary for a number of reasons however you can expect to be in the clinical area for about one hour.

## **Why have you been referred for a tunnelled central venous catheter?**

We use the catheter to give you medicines, chemotherapy, fluids or blood directly into your bloodstream. One of the main benefits is the doctors and nurses will not have to keep finding veins in your arms and hands to give you your treatment. The catheter can remain in for the duration of your treatment.

## **When can I discuss the procedure?**

You can discuss this with your referring doctor at the clinic or in the ward, and also with the nurse or doctor before your procedure.

## **Consent**

We will ask you to sign a consent form before the procedure. Please make sure that you ask any questions you may have. When signing the form you should know what we plan to do, alternative treatments, and any risks or complications of the procedure.

## **What do I need to do before the procedure?**

You may already be in hospital or we may ask you to attend as an out-patient. You may need certain blood tests but we will discuss this with you.

You may need to fast (this means no food or drink) before the procedure. The staff will discuss this with you when you get your appointment.

You may need to undress and wear a hospital gown.

## **What happens during the procedure?**

This is an aseptic procedure. This means we keep things clean to prevent infection.

This includes cleaning the area where we will insert the catheter and use sheets to cover the area, minimising the risk of contamination.

The technique may vary, but generally you will lie on your back on the procedure trolley or x-ray table and we will attach some equipment to you such as a blood pressure and heart monitor.

The nurse or doctor will clean the area over the neck vein and chest, or groin with an antiseptic solution and place some sheets. You will then have an injection of local anaesthetic which numbs the area. You may experience some discomfort from the local anaesthetic, but this should not last long. The nurse or doctor will use ultrasound equipment to guide a fine needle into the vein followed by a guidewire. The needle is then removed and replaced with a dilator. A dilator is a plastic tube used to make a fine track for the catheter. The catheter is then passed underneath the skin and into the vein. They will then insert a suture (stitch) to stabilise the catheter (stop it moving). Next, they apply dressings at the insertion site (the area that the vein has been accessed) and exit site.

There are different methods used to confirm the position of your catheter. We may use Continuous x-ray (fluoroscopy) during the procedure, or you may have a chest x-ray after the procedure. We will discuss these with you when you attend your appointment.

## **What happens afterwards?**

If you are having your procedure as an in patient you will return to your ward. The nursing staff will monitor the puncture site to make sure there is no bleeding.

If you are having the procedure as an out patient you will either go home or return to the clinical unit you were referred from. We will issue you with instructions on the care and maintenance of your catheter and what to do if problems arise.

A district nurse or hospital nurse will remove the stitch holding the catheter in place after three weeks – six weeks, depending on the type of catheter.

## **What are the risks and complications of tCVC insertion?**

This is not a high-risk procedure, but as with any surgical procedure there are some potential risks and complications which we will discuss with you.

Where the skin is penetrated (cut) there is a risk of infection. Signs of infection include a high temperature, flu-like symptoms including hot and cold sweats, shivering. Pain, redness, pus and swelling at the exit site may be a sign of infection. If you experience any of these symptoms please contact your clinical team, your GP or NHS24 on ☎ 111.

Any procedure that involves placing a catheter inside a blood vessel carries certain risks which include damage to the blood vessel. Damage to the blood vessel is rare, however you may require further treatment to repair the vessel.

Particularly in the event of an arterial puncture (when the artery is punctured rather than the vein).

Very rarely air can be introduced into your blood stream during insertion, this is known as an air embolism. If this was to happen the team inserting your catheter would take immediate action. They would give you oxygen to help dissolve the air embolus. They would position you on your left side and call for medical help if required.

A pneumothorax (collapsed lung) may occur; however, this is extremely rare. If it were to happen, you may need a chest drain to treat this.

Please make sure that you have the contact details for your clinical team. You might want to write this here:

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This leaflet is information about the procedure. We will give you a leaflet after your procedure about looking after your catheter.





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