



Cardiac catheterisation

What is cardiac catheterisation and why does my child need it?

Cardiac catheterisation is a procedure used to diagnose and treat certain heart conditions. A catheter (thin, plastic tube) is fed through the veins until it reaches the heart. Once it is in position, various things can be done:

- A contrast medium (dye) can be injected into the catheter to show up the veins in and around the heart
- A tiny tool on the end of the catheter can widen or open up narrow or blocked blood vessels
- Samples of blood can be taken from various positions in the heart to measure how well blood is flowing

Your doctor will explain the reasons why your child needs a cardiac catheterisation.

At Great Ormond Street Children's Hospital, most cardiac catheterisation is carried out while your child is under general anaesthetic. Older children may have sedation for the cardiac catheterisation instead of a general anaesthetic. This makes the procedure more comfortable for your child and enables him or her to stay in position throughout the procedure.

Preparing for the procedure

Your child may need to come to the hospital before the procedure for a pre-admission check. For more information, please see our *Pre-admission clinic for cardiology* information. The doctors will explain the procedure in more detail, discuss any worries you may have and ask you to give your permission for the procedure by signing a consent form. Another doctor will visit you on the ward to explain about the anaesthetic or sedation. The doctors may also ask for some blood samples to check that your child is well before the procedure. If your child has any medical problems, like allergies, please tell the doctors about these.

If your child is taking warfarin, this will need to be stopped three days before the procedure, to reduce the risk of serious bleeding during or after the cardiac catheterisation.

What happens before the procedure?

On the day of the procedure, your child will need to arrive on the ward at the time stated in your admission letter. The nurses will make sure that you and your child understand the procedure and get your child ready. They will then take your child to the cardiac catheterisation room.



What does the procedure involve?

Once your child is sedated or under general anaesthetic, a small area of his or her groin will be cleaned with antiseptic solution. The doctor will insert a needle into vein in your child's groin and then push a guide wire along it. He or she will then remove the needle and thread the catheter (thin, plastic tube) over the wire into the vein, removing the guide wire afterwards. The catheter will be threaded through your child's vein until it reaches the heart. The doctor will then carry out the procedures needed. Depending on what your child needs doing, the cardiac catheterisation will last between one and four hours.

Are there any risks with cardiac catheterisation?

At Great Ormond Street Children's Hospital, we perform lots of cardiac catheterisations each year and the team looking after your child are very experienced. However, as with all procedures, there are risks, which although unlikely, you should understand.

The cardiac catheterisation may be performed under sedation or general anaesthetic, and although every anaesthetic carries a risk, this is extremely small. There is only a small risk of infection because no incisions or cuts are necessary.

Your child may bleed from the area where the catheter is inserted, but this can be minimised by applying pressure for a few minutes after the procedure.

He or she may develop a bruise where the catheter was inserted, and feel some discomfort in this region, but pain relief like paracetamol is usually enough.

It is extremely rare to have an allergic reaction to the dye. If your child has any allergies, please tell the doctor before the procedure starts. The dye is removed from your child's body by the kidneys and is passed out through normal urination.

If your daughter is aged 12 years old or more, we will ask about her periods and whether there is any possibility she could be pregnant.

What happens afterwards?

Your child will return to the ward after he or she has recovered from the anaesthetic. After a general anaesthetic, some children feel sick and may vomit. Your child may have a headache or a sore throat or experience some dizziness, but these side effects are usually short-lived and not severe.

Your child will need to stay in bed for a few hours after the procedure to make sure the catheter site has started to heal. The nurses will check him or her regularly during this time.

Once your child has recovered fully from the sedation or anaesthetic, has had something to eat and drink and urinated (peed), you will be able to go home. The results of the cardiac catheterisation will be available at your child's next outpatient appointment.



When you get home

You should call the hospital if:

- your child starts bleeding from where the catheter was inserted
- your child is in a lot of pain and pain relief does not seem to help
- the area where the catheter was inserted looks red, swollen and feels hotter than the surrounding skin
- your child is not drinking any fluids after the first day back home

**If you have any questions,
please telephone Cardiac Day Care
on 020 7813 8347.**

**Out of hours, please telephone
Ladybird Ward on 020 7829 8829.**

Notes

Compiled by the Cardiac Day Care in collaboration with the Child and Family Information Group.

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www.goshfamilies.nhs.uk www.childrenfirst.nhs.uk