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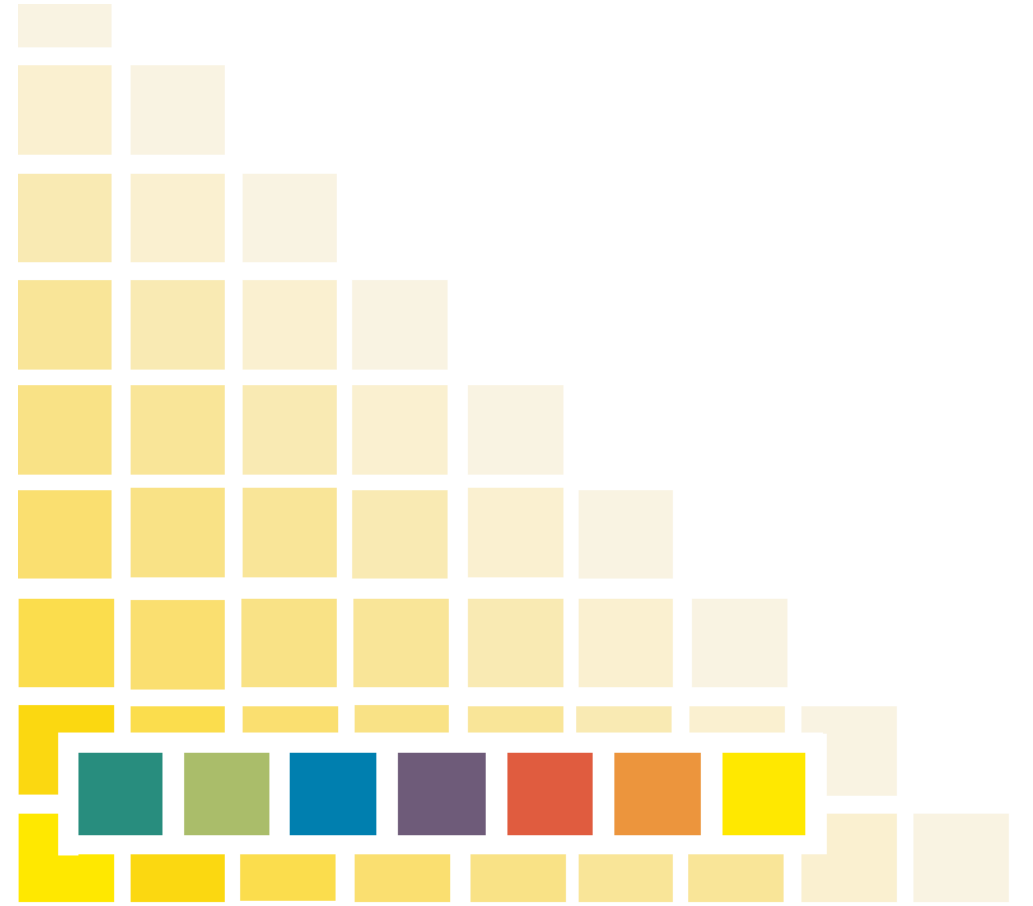
May 2007

إذا كنت ترغب بالحصول على ترجمة فورية لمضمون هذه الوثيقة الى اللغة العربية، يرجى منك الإتصال باحد مستخدمينا بجناح المصلحة أين يتم إستشفائك. أحد موظفينا سيسعى لترتيب إجراءات الترجمة وإتمامها في الوقت المناسب لك.

Brosürteki bilginin Türkçe tercümesi için tedavi görüyor olduğunuz bölüme bas vurunuz. Bölüm personeli tercümenin gerçekleşmesini en kısa zamanda ayarlayacaktır.

If you have concerns about any aspect of the service you have received in hospital and feel unable to talk to those people responsible for your care, call PALS on 020 7349 7715 or e-mail pals@rbht.nhs.uk. This is a confidential service.

Your cardiac catheterisation: information for young people and their parents



This booklet has been written to give you, and your parents, information about your visit to hospital for a diagnostic cardiac catheterisation. It is not meant to replace the information and explanations that your doctors and nurses will give you, but we hope it will be a helpful guide for you to use before and after your time in hospital. If you or your parents need any further information, please just ask a member of the ward team.

What is a cardiac catheterisation?

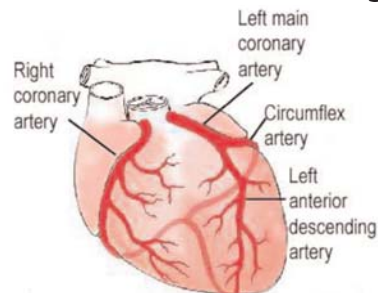
A cardiac catheterisation is a special x-ray investigation of your heart. It uses a dye to show up the arteries in the heart so that detailed pictures can be taken of them. The moving image produced from this procedure is called a "coronary angiogram".

To perform the procedure, we make a small hole in the skin of your groin through which we pass a catheter (a very thin, flexible tube). The doctor then moves the catheter through the blood vessel into your heart. Once the catheter is in place, we can use it to see your heart and how it is structured, as well as to measure pressure inside your heart and blood vessels and to take blood samples.

Usually the procedure is carried out while you are asleep under a general anaesthetic and so you will not feel any pain.

Understanding the arteries of the heart

The heart is mainly made up of special muscle. The muscle is special because it is always working. The heart pumps blood into the arteries which is carried to all parts of the body. As the heart pumps all the time it needs a good blood supply. This is provided by the coronary arteries as shown in the diagram below:



After the meeting, we will contact you and your parents by letter or telephone to explain your results and your future treatment. A cardiac catheterisation does not always give us all the information we need to decide on the best treatment for you. In these instances, we may need to perform further tests. We will explain each of these to you.

When can I go home?

How quickly you go home will depend on how quickly you recover from the procedure. Some patients are well enough to go home on the same day. Others may be asked to stay overnight just so that we can make sure they have fully recovered. If you do have to stay in hospital, there are facilities for your relatives to stay with you. When can I go back to school or work? Everyone is different and so recovers at a different rate after an operation. Most people are able to go back to school or work about two to three days after the catheterisation. You must not drive for at least two days after the procedure, and should avoid strenuous work or activities like sport for the week or so following the catheterisation.

Who can I contact for further advice or information?

Lynda Davies Shaughnessy, Cardiac Nurse Specialist (Transition)
Adult Congenital Heart Disease Unit
Royal Brompton Hospital

Via hospital switchboard: 020 7352 8121, bleep 1129
Direct line: 020 7351 2156
E-mail: achd@rbht.nhs.uk

Children's Cardiac Nursing Liaison Team
Paediatric Cardiology Department
Royal Brompton Hospital

Via hospital switchboard: 020 7352 8121, bleep 1276
Direct line: 020 7349 7727
E-mail: ccln@rbht.nhs.uk

- **Effects of the anaesthetic:** Some people feel drowsy or sick after an anaesthetic, or develop a fever or chest infection. Serious complications with, or reactions to, the anaesthetic are very rare – they occur in less than 1 in 10,000 uncomplicated cases. Children and young people normally recover quickly from a general anaesthetic.

- **Bleeding, bruising, or damage at the catheterisation site:** There is a small chance of complications at the catheterisation site (where the initial hole is made). These might include bruising, bleeding, and damage to the blood vessel. Sometimes we advise patients not to sit up for the first few hours after this procedure. This is to make sure that the hole made by the catheter heals properly. If the hole bleeds, we will apply pressure to it, or put a special dressing over it. If there is bruising, we will observe it to ensure it doesn't get bigger and heals with no problems. If any of these complications occur the patient may need to stay in hospital for a little longer for observation – usually overnight.

What will happen if I do not have this procedure?

If you do not have this procedure we will not have the detailed information on your heart problem that helps us to give you the best treatment.

What happens after the cardiac catheterisation?

Immediately after the procedure we will take you to the recovery room. Then, when you are ready, you will be taken back up to the ward. You will stay in bed for a few hours, and nurses will regularly check your pulse, blood pressure, and the site at which the catheter was inserted into your blood vessel.

Usually, the results of cardiac catheterisation are available immediately after the procedure and the doctor will come to discuss these with you and your parents. Sometimes, the doctor will need to discuss the results of your cardiac catheterisation with other doctors at the hospital. This will happen at the weekly meeting of all cardiac doctors and surgeons.

What will happen when I come into hospital for my cardiac catheterisation?

Firstly, a nurse will complete some paperwork with you. He or she will take your height, weight, pulse, blood pressure and usually your oxygen saturations (this is how much oxygen is being carried in your blood). We will then give you a hospital gown to change into, and will ask you to remove your underwear, and any jewellery or makeup.

A doctor will come to see you before the operation. He or she will ask you questions about your health, and will examine you. The doctor will also explain the operation to you, and will tell you about any risks. If you have any questions, or if you want the doctor to explain something again, just ask. We want you to know all about the operation you are having.

Once the doctor has explained everything, and you have asked any questions, you or your parents will be asked to sign a consent form. This is a confirmation from you that the procedure has been explained to you, and that you are willing to go ahead.

You will usually have a chest x-ray, blood tests, and sometimes an ECG (electrocardiogram) performed before the catheterisation itself. These tests help us to make sure you are well enough to have the procedure. The chest x-ray and blood tests tell us whether you have any infections, and the ECG checks that your heart rhythm is normal.

Cardiac catheterisation can harm an unborn baby so if you are female and over 12 years old, we will perform a urine test before the procedure to make sure you are not pregnant.

If the pregnancy test is positive we will postpone the cardiac catheterisation and discuss the various options with you. If you think you might be pregnant and wish to speak with someone confidentially you can contact one of the nurses on the children's cardiac nursing liaison team (details on Page 6 of this booklet).

How is a cardiac catheterisation carried out?

When the time comes for your procedure, we will take you to the anaesthetic room next to the operating theatre. A small needle will be put into the back of your hand. We will use the needle to give you some medication that will send you to sleep.

Cardiac catheterisation procedures are carried out in a cardiac catheterisation laboratory – you may hear this called a “cath lab”. The procedure takes about thirty minutes and you will be asleep all the way through.

What are the benefits of the procedure?

This procedure gives your doctors a more complete understanding of your heart and how well it is working, which allows them to plan your treatment appropriately.

Please remember that the potential risks of a procedure are always balanced by the potential benefits and that your doctor would not have suggested this procedure unless he/she thought it was in your best interests.

What are the alternatives to this procedure?

There are other tests we can perform on your heart, but none that will provide us with such detailed information. An echocardiogram, for example, gives us very valuable information without requiring an anaesthetic but cannot always show us every area or vessel in the heart in the way that a cardiac catheterisation can.

What are the risks of the procedure?

There are risks involved with any medical procedure. However, the risks involved with cardiac catheterisation are small. The most common complications during the procedure are:

- **Rhythm disturbances:** Sometimes, the heart starts to beat abnormally during a cardiac catheterisation. Usually, it returns to normal once the procedure is over but sometimes (in less than 1 in 1,000 cases) medication, a mild electric current, or a temporary pacemaker (which regulates the rhythm of the heart) is needed to help the heart beat normally.
- **Blood clots:** Very rarely (in 1 in 1,000 cases) a blood clot forms in the catheter, gets into the bloodstream, and travels to the brain, causing a stroke. During the procedure, we give you a blood thinning drug called heparin to stop this from happening. If the complication does occur, any effects on the brain are usually temporary. Permanent effects are extremely rare.
- **Catheter perforation:** Extremely rarely (in less than 1 in 10,000 cases) the catheter causes damage to the heart valves, or makes a small hole in the heart itself. Damaged areas sometimes bleed, and this blood may need to be removed using a needle. In extremely rare cases, a surgeon may need to operate in order to repair the damage. More often than not, however, nothing needs to be done to repair the slight damage caused by the catheter. Sometimes, complications occur after the procedure. The most common complications are:
 - **Loss of pulse:** Sometimes, an artery can become blocked after the catheterisation. This blockage can sometimes make your pulse disappear – this means that we can't feel your heartbeat when we, for example, hold your wrist. Usually the pulse returns once we give some medication to thin the blood and treat any clots that may have formed. This complication is more common in new born babies but, even so, is rare – it occurs in less than 1 in 100 cases.