PATIENT/FAMILY GUIDE

CORONARY ANGIOPLASTY (PTCA/ PCI)



This patient guide is designed to answer questions most frequently asked by our patients and their families. These general guidelines may be changed to meet your needs. If you have any further questions, please ask. We are here to help you.



The Aga Khan University Hospital

Coronary Angioplasty (PTCA/ PCI)

What is Coronary Angioplasty?

Coronary Angioplasty is a procedure used to widen (dilate) the narrowing in your coronary artery without having surgery. You and your doctor have decided this is the best treatment for you.

How does Angioplasty Work?

The basic idea of angioplasty is to place a special catheter with a small balloon on the end inside the narrowed section of the coronary artery. The balloon is then inflated and deflated several times to stretch the artery and flatten the deposits against the walls of



the artery. Once the artery is opened, blood can then flow more easily to feed the heart muscle. In some cases a special wire mesh or "stent" can be placed inside the artery which further ensures sustained blood flow to the heart muscles.

Can everyone who has chest pain have Angioplasty?

No, for you to have this procedure depends on:

- The overall functioning of your heart
- · How long you have had angina
- · How many of your vessels are narrowed or blocked
- · Where the narrowing or blockage is
- How severe it is

Only a doctor, who is familiar with your case, can determine the best form of treatment for you

What should my Doctor know?

Be sure to tell your doctor:

- What medicines you are currently taking.
- Any allergies you have, especially to X-ray dye or iodine. These allergies may need additional medicine before the procedure.
- If you can not take aspirin. This and other medicines are usually begun before to angioplasty and continued for several months afterwards.

In some cases, the failure of angioplasty will lead to open heart surgery Usually, this will be done immediately after the unsuccessful angioplasty

When can I go home?

You are likely to go home one or two days after the angioplasty unless some other treatment is needed. You should arrange for some one else to take you home rather than driving yourself

After Coronary Angioplasty there is a 20 to 30% chance of your artery re-blocking. Angina (chest, arm or jaw discomfort with or without shortness of breath, light headedness or nausea) is the most common indication that re blocking has occurred and is usually a sensation which is similar to that you experienced before angioplasty

IF YOU EXPERIENCE THESE SYMPTOMS YOU MUST NOTIFY YOUR DOCTOR

For further information please contact

Cardiology Consulting Clinic 3662073 Cardiology Catheterisation Laboratory 3662374

After Hours

The Accident & Emergency Department 3662025

What can I expect after the procedure?

At the end of the procedure, the decision will be made whether or not the artery has been adequately opened by angiography. The cardiologist will look for improvement in the appearance of the artery and the flow of blood through it

- You will be brought to a special care area, where you will be monitored for about 24 hours
- The nurse will regularly check your blood pressure, heart rate, and pulses in your feet and puncture spot
- ECGs, blood tests and IV medicine therapy will be routinely done following the procedure

If you had the procedure through the wrist a smaller pressure dressing will be applied and you can be nursed in any manner most comfortable for you

If you had the procedure through the groin once the sheath is removed:

- A pressure bandage or sand bag will cover the groin area and will stay in place for several hours
- You will stay flat on your back for four hours, keeping the affected leg straight after the pressure bandage/bag is removed. Do not bend the knee or the hip of the side that was used during the procedure as movement may cause bleeding from the puncture spot
- If you feel the need to cough or sneeze, press firmly on the bandage with your fingers

Be sure to notify the nurse immediately if you feel sharp pain or a wet warm sensation under the bandage, or if you experience any chest, arm or jaw discomfort.

You will need to pass water often because your kidneys will be getting rid of the X-ray dye that was injected into your coronary arteries. Ask the nurse for help when you need to use a bedpan or urinal, if the access site for your procedure was through the groin.

If your wrist was used you may be able to use the washroom earlier.

You are allowed to take lots of fluids to help get rid of the dye.

Your first meal will be a light one and will be given after the "sheath" is removed.

What if Angioplasty fails?

The possibility of failure and risk of complications will be discussed with you before the procedure and an alternate plan of action will be developed.

What preparation will I have to do?

You will be booked for your test through the Consulting Clinic Unit Receptionist or the Ward Unit Receptionist. When booking, a non- refundable deposit will be needed to confirm your appointment for the procedure

If you are not able to come for the angioplasty, please call the Cardiac Catheterization Laboratory at 3662374 or the Consulting Clinic at 3662073

Special instructions:

- Pack a bag for an over-night stay
- The medicine that you take at home should be taken in the morning as usual with a sip of water
- Bring all your medicines with you (preferably in their original dispensed bottles)
- Do not bring any valuables or jewelery
- Special parking facilities are available at Aga Khan University Hospital
- Arrange a ride home from the Hospital after discharge. You should not drive yourself

What can I expect before the Angioplasty?

The angioplasty preparation is very much like your previous coronary angiogram. You may be admitted to the Hospital the day before or the same day of your procedure, provided your tests have been completed ahead of time

From the Admission Office you will be directed to your room or the Cardiac Short Stay Unit

The following tests will be done:

- ECG
- Chest X-ray (if not done within the last three months)
- Blood tests
- On the evening before the procedure, both wrists and groins will be shaved and cleaned carefully
- You will not receive anything to eat or drink for 4-6 hours before the procedure Take your medicines with sips of water
- An intravenous (IV) line will be started in the morning before the procedure and you may be given a pill to help you relax



What can I expect during the procedure?

A coronary angioplasty is similar to a coronary angiogram procedure. Therefore, the equipment used and the preparations are the same. You will remain awake throughout the procedure and should feel free to ask questions and describe any unusual sensations you might have

The doctor or nurse may ask you to do several things such as move your head, move your arms behind your head, cough or take deep breaths. It is important that you listen carefully and follow the instructions for which the nurse will assist you A local anaesthetic will be injected into the wrist or groin area and the cardiologist will insert a sheath into the artery. Through this a long catheter is advanced to the heart arteries

The cardiologist will then attempt to direct the balloon through the catheter into the blocked artery and through the narrowed segment. Once the balloon is positioned in the narrowing of the artery, it is inflated for several seconds up to several minutes depending on the nature of the blockage

The balloon may be inflated and deflated several times in order to press the plaque back against the wall of the artery

In many cases, a wire mesh or "stent" may be used to further improve the results of balloon treatment. This wire mesh or stent mounted on a special balloon can be deployed at the narrowed segment through the same approach

Some people feel chest discomfort that is similar to the angina they have experienced. This happens because the balloon is temporarily blocking off the blood supply to a small area of the heart muscle. Be sure to let the doctor or nurse know immediately, if you begin to have any discomfort

Once the doctor is satisfied that your artery has opened, the balloon will be removed and some final pictures taken

If you have the procedure through the wrist the sheath is removed in the cardiac catheterization laboratory and replaced with a tight arm band to prevent bleeding from the access site

If you have the procedure through the groin, the sheath will be secured and left in the groin for several hours. This will then be removed in the room and replaced by a special clamp or manual compression. This will be maintained for as long is required to stop bleeding from the access site

The entire angioplasty procedure usually takes one to two hours.

Before, during and after the procedure you will receive blood thinners. If you have any concerns, bleeding problems or allergies to any such medicines please let your doctors and nurses know

Is Angioplasty a painful procedure?

You will feel very little or no discomfort during angioplasty. Before starting the procedure, your doctor will inject a local anaesthetic where the catheters will be inserted

You may feel a stinging sensation as he does this. However, after the medicine on takes effect, you should only feel dull pressure where he is working with the catheters

If you do feel pain, please tell your doctor so he can give you additional medicines



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