WHAT IS COARCTATION OF THE AORTA?

Coarctation of the aorta is a congenital heart condition. This means that before you were born there was a problem with the development in the structure of your heart.

The aorta is the large artery that takes oxygen rich blood from your heart to the rest of your body. Coarctation is a narrowing in part of your aorta which stops the lower half of your body receiving enough blood. Before you were born, your blood circulation worked differently. There was an opening in your circulation called the ductus arteriosus. This closed up shortly after birth. If you were a baby with severe coarctation of the aorta, the only way your blood could flow to the lower half of your body was through this duct. So when your duct closed, not enough blood got to the lower half of your body.

For some of you the coarctation may have been milder and not so obvious, it will gradually develop over time – sometimes weeks, sometimes years. The narrowing of your aorta would have made it harder for your heart to pump blood all the way around your body, and past the narrowed part of your aorta. This may have caused your ventricle to become thickened because, like any muscle, the harder it works, the bigger it gets.

Some of you with coarctation of the aorta have other heart abnormalities, such as a hole between the ventricles in your heart. This is called a ventricular septal defect, or VSD. Others of you may have a narrowed aortic valve (aortic stenosis) or an aortic valve that has only two cusps instead of three (bicuspid aortic valve).

SURGERY

When you were younger most of you will have had open heart surgery either where a narrowed part of the aorta was cut out and the ends stitched back together again, or where a patch made of special material will have been put in the narrow part of your aorta to enlarge it.

Most of you with a repaired coarctation of the aorta will have led normal, active lives after your operation. But sometimes the narrowing can develop again as time goes by, like in your teenage years. If this happens, you may need further treatment. It is also possible to develop a weakness in the wall of the aorta, which may need further treatment.

You will need to be seen throughout your life at a cardiac clinic. But for some of you, the newer balloon dilatation technique can be used instead of having to have further open heart surgery. High blood pressure can develop in some people, particularly as you get into adulthood, and this may need to be controlled by medicines.

BALLOON DILATATION

A balloon is inflated inside your aorta to make the narrowing wider (also known as angioplasty). If you were diagnosed with coarctation of the aorta when you were a teenager and have had balloon dilatation, a metal mesh tube, called a stent, may also have been put in to keep the narrowed part of the aorta open.

ENDOCARDITIS

To reduce your risk of getting endocarditis:

- Keep your teeth and mouth clean and have regular check-ups with a dentist
- Avoid body piercing and tattooing
- Never inject recreational drugs

THINGS TO TALK ABOUT

- Endocarditis
- Physical activity
- Healthy lifestyle
- Pregnancy
- Contraception
- Medicines (including warfarin)
1 narrowing (coarctation) of the aorta.

1 aorta
2 main pulmonary artery.