

# Transposition of the great arteries 06

## WHAT IS TRANSPOSITION OF THE GREAT ARTERIES?

**Transposition of the great arteries (TGA) 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.**

Before you had surgery as a baby your pulmonary artery and aorta were the wrong way around (or transposed). Your pulmonary artery came off from your left ventricle instead of your right, and your aorta came off from your right ventricle instead of your left.

In normal circulation oxygen-poor blood gets taken from the right side of your heart, through your pulmonary artery to your lungs, where it picks up oxygen. This oxygen-rich blood goes to the left side of your heart and is pumped out to your body through your aorta.

But in TGA, oxygen-poor blood did not go to your lungs, instead it was sent back around your body without picking up

any oxygen. Also oxygen-rich blood did not go to your body, instead it was sent to the lungs without taking much needed oxygen to your body.

### SURGERY & TREATMENT

Some babies born with TGA also have a hole in the heart (VSD or ASD). This hole can actually be helpful at first to let some oxygen-rich blood to get around your body. The arterial switch operation is now the most common type of surgical treatment for babies who are born with TGA.

### THINGS TO TALK ABOUT

- Endocarditis
- Physical activity
- Healthy lifestyle
- Pregnancy
- Contraception
- Medicines (including warfarin)

For over 50 years we've pioneered research that's transformed the lives of people living with heart and circulatory conditions. Our work has been central to the discoveries of vital treatments that are changing the fight against heart disease. But so many people still need our help.

From babies born with life-threatening heart problems to the many Mums, Dads and Grandparents who survive a heart attack and endure the daily battles of heart failure.

Join our fight for every heartbeat in the UK. Every pound raised, minute of your time and donation to our shops will help make a difference to people's lives.

During the arterial switch operation the surgeon switches your great arteries back to the position they should be in. This sounds straight forward, but smaller structures such as your heart valves and coronary arteries are involved, making it more complicated.

At birth we all have an open ductus arteriosus, which is like a small tube between your aorta and your pulmonary artery and allows some mixing of your oxygen-rich and oxygen-poor blood. Usually this duct begins to close a few hours or days after your birth.

A baby with TGA may die quickly if this duct closes, as it is the only way of getting oxygen-rich blood to your body. Emergency drugs and balloon septostomy are used to keep your duct open. This is where a hole between the upper chambers of your heart is made to allow mixing of your blood.

### AFTER SURGERY

Most of you who have had a successful switch operation will lead fairly normal lives, but complications can occur as you get older. These include narrowing of the artery leading to your lungs (the pulmonary artery), leaking heart valves (most commonly your aortic valve), and narrowing of your coronary arteries which feed your heart muscle with blood.

These complications are rare, but if they are serious you may need further surgery. You will need to have regular visits to the cardiac clinic throughout your life.

### ENDOCARDITIS

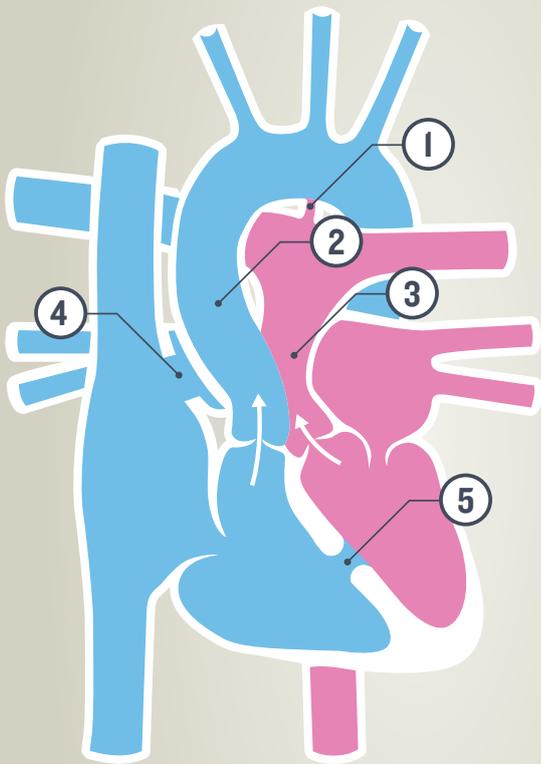
**To reduce your risk of getting endocarditis:**

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

# YOUR HEART

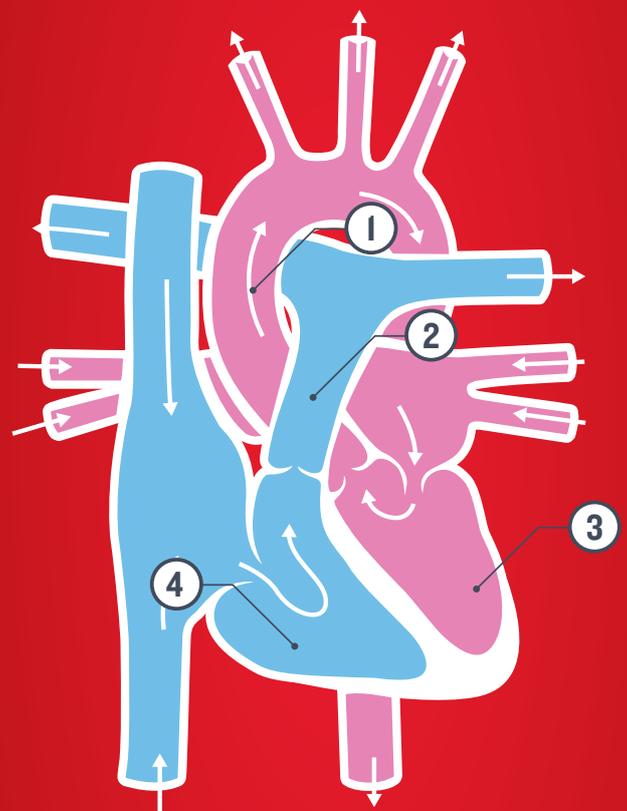
Find out more about your heart:

[yheart.net](http://yheart.net) / [chfed.org.uk](http://chfed.org.uk) / [thesf.org.uk](http://thesf.org.uk)



- ① the duct
- ② aorta
- ③ main pulmonary artery
- ④ you may have an ASD
- ⑤ you may have a VSD.

# THE HEART



- ① aorta
- ② main pulmonary artery
- ③ left ventricle
- ④ right ventricle.