

## Tricuspid Atresia

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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 lifethreatening 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.

### **WHAT IS TRICUSPID ATRESIA?**

Tricuspid atresia 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.

Your tricuspid valve should sit between the right top chamber of your heart (atrium) and the right bottom chamber (ventricle). If you have tricuspid atresia, your valve didn't develop properly, and is either closed or missing. There was also a hole between the top two chambers of your heart (atrial septal defect or ASD), and the bottom two chambers of your heart (ventricular septal defect or VSD). This means that oxygen - rich blood mixed with oxygen - poor blood. Your right ventricle may also be smaller. You may also have had other heart conditions such as transposition of the great arteries (TGA).

#### When you were born

You may have been blue as a baby because not enough oxygen was getting round your body. This is because not enough blood was getting to your lungs to pick up oxygen, or too much blood was flowing to your lungs. You may have been breathless. The blood going around your body had mixed due to your ASD and VSD. These problems in your heart made it impossible for oxygen-poor blood to get from your body to your lungs properly, or in some cases at all. Before you were born your mum gave you all the oxygen you needed. Blood went round the blockages in your heart due to a hole (foramen ovale) and a tube (ductus arteriosus the duct) that are always in the heart of a newborn baby. These close a few days after birth, so a medicine (prostaglandin) kept them open until you were well enough to have your first operation.

#### **SURGERY & TREATMENT**

It's not possible to make your heart completely normal, but surgery can make it work much better. If you had too much blood going to your lungs then you may have had pulmonary artery banding. If you had too little you may have had a shunt

(small tube) put in, connecting your head and neck arteries to your pulmonary arteries. Once older you would have needed more blood going to your lungs to pick up more oxygen so it's very likely you will have needed a second operation.

The cavo-pulmonary connection, or sometimes called a Glenn shunt or a hemi-Fontan, connects your main vein (superior vena cava) carrying your blood from your head and neck, and attaches it onto your lung blood vessels (pulmonary arteries). More blood can pick up more oxygen for your heart to pump it around your body. During the operation, your small tube (shunt) or the pulmonary artery band that was put in at the first operation will have been removed.

When you were a bit older, you will probably have had a third operation called a Fontan procedure or a TCPC (total cavo-pulmonary connection) operation. This connects your main vein (inferior vena cava), carrying blood up from your body, to your pulmonary arteries. One of the holes in your heart (ASD) will be closed. This is the first time that oxygen-rich

and oxygen-poor blood will have been separated, and so it will have been the first time that you were pinker.

#### **AFTER SURGERY**

Even though you have had lots of operations your heart will never be able to work normally. You will need regular check-ups with your cardiac team throughout your life. Tests to check your heart function, medications to keep your heart in balance and you may need further small operations/ interventions to keep you heart working well. You will also need to learn to balance your levels of physical activity.

#### **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

Revealing the facts about your condition

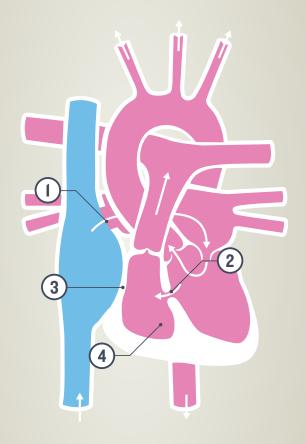






# **YOUR** HEART

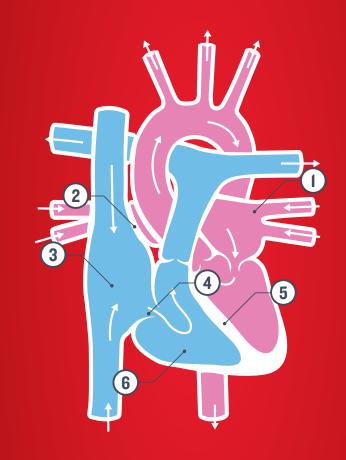
Find out more about your heart: yheart.net / chfed.org.uk / lhm.org.uk



- ① atrial septal defect (ASD)
- ventricular septal
- defect (VSD)

  3 blocked/narrowed or unformed tricuspid valve
- 4 small right ventricle.





- left atrium
- atrial septum
- right atrium
- tricuspid valve
- 5 ventricular septum
- 6 right ventricle.