

# TRANSPOSITION OF THE GREAT ARTERIES (TGA)

## What is it?

- The aorta and pulmonary artery are the wrong way around.
- Older patients likely to have had an atrial switch, either a Mustard or Senning procedure, whereby baffles (channels) are made to divert blood to correct place.
- Younger adults most probably have had an arterial switch operation, whereby the aortic and pulmonary artery are switched and connected to correct ventricles.

## How is it diagnosed?

- Echocardiogram
- Cardiac MRI and CT
- Cardiac Catheterisation
- Nuclear techniques (CPET)

## How does it affect the heart?

- Atrial switch patients have a variety of issues affecting the heart:
  - o Dysfunction of RV is common.
  - o Tricuspid regurgitation often develops as a sign of RV dilation.
  - o Tachyarrhythmias occur frequently.
  - o Atrial flutter is common and other supraventricular arrhythmias can occur.
  - o With longer follow-up ongoing loss of sinus node function.
  - o Multiple issues can occur with baffles (surgically introduced tunnels between atria).
- Younger patients having had arterial switch are likely to be asymptomatic but can develop LV dysfunction and arrhythmias, aortic regurgitation and pulmonary stenosis.

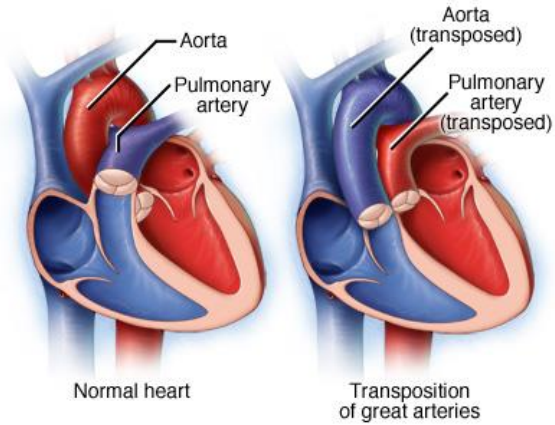
## What is the long-term management?

- May need valve replacement for tricuspid regurgitation, stenting for baffle stenosis or leaks, surgical treatment of aortic stenosis or pulmonary venous obstruction.
- Stenting considered for asymptomatic patients with baffle stenosis or leaks.
- Arterial switch patients less likely to need intervention; however, could require stenting for coronary artery stenosis or surgical repair for right ventricular outflow tract obstruction.
- Exercise and pregnancy have various risks; all patients should be counselled on individually.

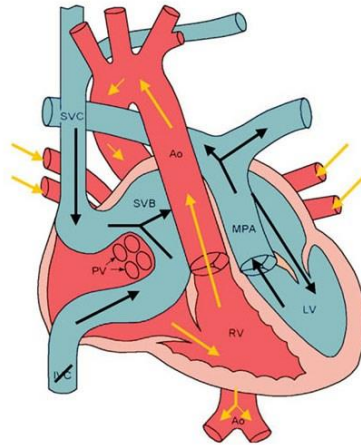
## What is the follow up?

- All patients should have an ACHD follow-up at least annually.
- Ongoing follow-up required through life and additional interventions are likely to be required.

## TRANSPOSITION OF THE GREAT ARTERIES (TGA)



### MUSTARD/SENNING OPERATION



### ARTERIAL SWITCH OPERATION

