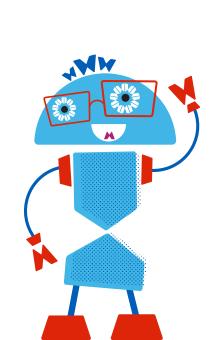


Red Flags

Clair Noctor
Cardiac Specialist Practitioner
Royal Manchester Children's Hospital





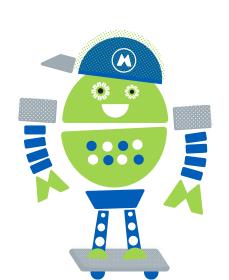


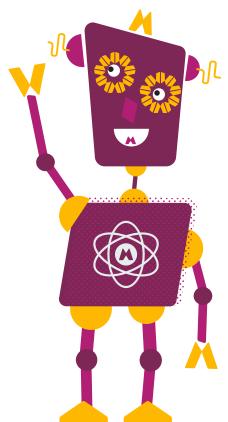
Cardiac Output

Amount of Blood Ejected From One Ventricle per Minute

Dependent on Four Factors

- Pre-load (Stretching)
- Contractility (Efficiency)
- Afterload (Resistance)
- Heart Rate/Rhythm





Cardiac Output

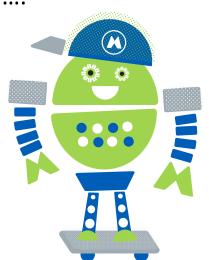


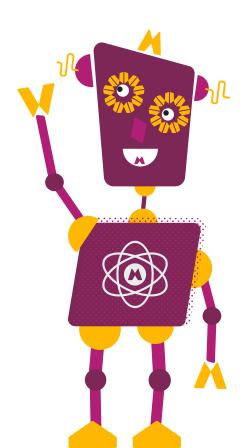
Dependent on Age and Weight

- Infant = 200ml/kg/min
- Child = 150ml/kg/min
- Adolescent = 100ml/kg/min

A new born baby weighing 3 kg = 3×200 = 600ml/minute

Usual Circulating volume ~ 350ml......





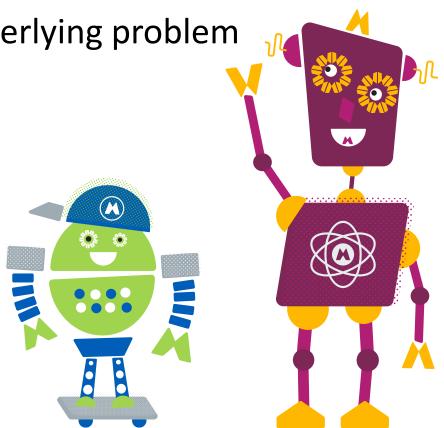
Heart Failure



- Inability of the Heart to satisfy the metabolic demands of the body
- Always due to something else
- Can be controlled

- Need to address the underlying problem

- ~ Structural
- ~ Electrical
- ~ Mechanical

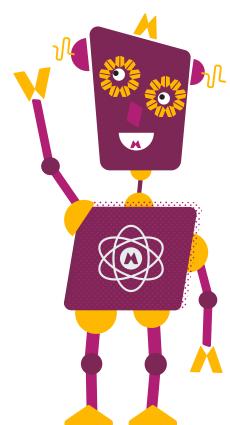




"Looks bad, it is bad"

Mary Jane Hazinski, 1994



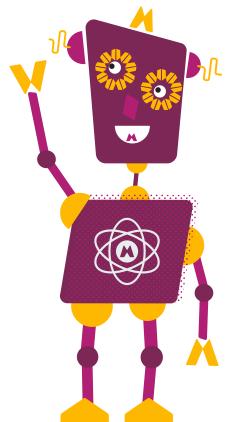


Signs and Symptoms of Heart Failure



- Poor feeding
- Sleepy
- Poor growth
- Tachypnoea
- Tachycardia
- Weak, thready pulse
- Cyanosis
- Cough
- Increased weight
- Decreased Urine Output
- Cold, clammy (mottled) skin
- Oedema
- Increased Liver size
- Vomiting
- Anxious, restless
- Lethargy
- Hypotension







If some of these are present......

