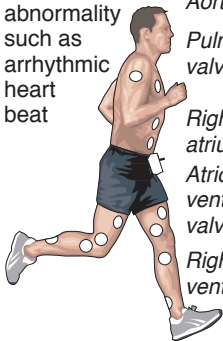


Hidden killer for young athletes

Sudden cardiac arrest, a leading killer of young athletes, typically results from a congenital abnormality, with the heart unable to cope with extreme exertion, or can also be caused by a blow to the chest

Athletes should be monitored to detect any abnormality such as arrhythmic heart beat



Superior vena cava

Aorta

Pulmonary valve

Right atrium

Atrio-ventricular valve

Right ventricle

Pulmonary artery

Pulmonary veins

Left atrium

Left ventricle

NORMAL RHYTHM

1 Atria contract

Blood pumped into ventricles

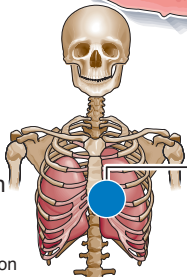


2 Ventricles contract

Blood pumped into body



MALFUNCTION: Unlike **myocardial infarction**, when blockage slows or stops blood flow, sudden cardiac arrest occurs when heart muscles begin to twitch spasmodically – **ventricular fibrillation**



COMMOTIO CORDIS: VF can also be caused by impact on sternum during 30 millisecond window in cardiac cycle.

Immediate electrical defibrillation is required

