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**COURSE TITLE; GROSS ANATOMY OF THORAX AND ABDOMEN**

**COURSE CODE; ANA 202**

**ASSIGNMENT TITLE; MEDIASTINUM AND ITS CONTENT**

**DEPARTMENT; HUMAN ANATOMY**

**Question**

1. You will be provided with a video, watch it and use it to describe the heart and its function
2. Write on five (5) different congenital abnormalities of the heart
3. Our heart beats 100,000 times per day pushing 5000 gallons of blood through our body every 24hours.It delivers oxygen and nutrient-rich blood to our tissues and carry away waste.

The heart is muscular organ roughly the size of a closed fist. It sits in the chest, slightly to the left of center. As the heart contracts, it pumps blood around the body. It carries deoxygenated blood to the lungs where it loads up with oxygen and uploads carbon dioxide, a waste product of metabolism

The heart, blood, and blood vessels combined are referred to as the circulatory system. An average human has around 5liters (8 pints) of blood which is constantly pumped throughout the body

The heart is made up of four chambers with several valves that regulate the normal flow of blood within the body

Two chambers called atria are located in the upper portion of the heart and receive oxygen- free blood. The valves that separate these chamber are called atrioventricular valves which is composed of the tricuspid valve on the left and mitral valve on the right

On the other hand, ventricles are chambers found on the lower portion of the heart; they pump oxygen- enriched blood into all organ of the body, reaching even the smallest cells. Similar to the atria, the ventricular chamber are also separated by valves ,these are comprised of the pulmonary and aortic valve

Function of the heart

The heart circulates blood through two pathways; the pulmonary circuits and the systemic circuit.

In the pulmonary circuit, deoxygenated blood leaves the right ventricles of the heart via the pulmonary artery and travels to the lungs, they return as oxygenated blood to the left atrium of the heart via pulmonary vein

In the systemic circult, oxygenated blood leaves the body via the left ventricle to the aorta and from there enters the arteries and capillaries where it supplies the body’s tissues with oxygen. Deoxygenated blood returns via veins to the venae cavae, re-entering the heart’s right atrium

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1 .aortic valve stenosis

Aortic valve stenosis is a serious type of congenital heart defect.

In aortic valve stenosis,the aortic valve that controls the flow of blood out of the main pumping chamber of the heart(the left ventricle) to the body’s main artery( the aorta)is narrowed. This affects the flow of oxygen-rich blood, and may result in the left ventricle muscle thickening because the pump has to work harder

1. Coarctation of the aorta

Coarctation of the aorta (CoA) is where the main artery (the aorta) has a narrowing, which means that less blood can flow through it.

CoA can occur by itself or in combination with other types of heart of heart defects- such as ventricular septal defect or a type of defect known as a patent ductus arteriosus.

The narrowing can be severe and will often require treatment shortly after birth

1. Septal defects

A septal defect is where there’s an abnormality in the wall (septum) between the main chambers of the heart. The two main types of septal defect are

Atria septal defects and

Ventricular septal defects

4 .hypoplastic left heart syndrome

Hypoplastic left heart syndrome (HLHS) is a rare type of congenital heart disease, where the left side of the heart doesn’t develop properly and is too small. This results is not enough oxygenated blood getting through to the body

5. Tricuspid artesian

Tricuspid Artesia is where the tricuspid heart valve hasn’t formed properly. The tricuspid valve separates the right – sided collecting chamber (ventricle). Blood can’t flow properly between the chambers which cause the right pumping chamber to be underdeveloped.