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Course : ANA 202

Department : pharmacology

Matric no : 18/mhs07/043

A] describing the heart and its function ;

The heart is an organ that supplies blood to all parts of the body which lies behind the sternum or the breast bone . it is divided into four chambers , the upper chamber is known as the atrium while the lower chamber is known as the ventricle they receive blood from the atrium .

The ventricle pumps blood to the body ,however the chamber of the heart are separated by valves. There are four types of valves which includes the aortic ,mitral ,pulmonary , Tricuspid **valve** and are responsible for the direction of blood flow in the heart . circulation begins from the right side of the heart where blood from the body comes to the right atrium then , passes through the right ventricle to receive oxygen .

In the right side of the heart the tricuspid valve separates the right atrium and the right ventricle which prevents the backflow of blood as it is pumped from the right atrium to the right ventricle. The pulmonary valve prevents the backflow of blood as it is pumped from the right ventricle to the pulmonary artery.

In the left side of the heart the the mitral valve separates the left atrium and the left ventricle and prevents the backflow of blood as it is pumped from the left atrium to the left ventricle. The aortic valve allows blood to be pumped to the rest of the body .

Arteries carries blood throughout the body while, veins takes blood back to the heart and pumps to the lung for it to be oxygenated . Coronary arteries carries oxygenated and nutrient-filled blood to the heart muscle, the right coronary artery supplies blood to the back and bottom of the heart while the left coronary artery supplies blood to front of the heart .

Electrical signals are transmitted throughout the heart to control its pumping which begins at the sinoatrial node which is the natural pacemaker of the heart , electrical impulses passes through the lower chamber of the heart with the aid of atrioventricular node which control signal to enable

the atrium to contract . in the ventricle, pathways are carry electrical impulses to the muscle in order to contract and pump blood to the rest of the body .

B] different congenital anomalies of the heart ;

1] Aortic valve stenosis

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 away from the heart, towards the rest of the body, and may result in the left ventricle muscle thickening because the pump has to work harder.

2] Pulmonary valve stenosis

Pulmonary valve stenosis is a defect where the pulmonary valve, which controls the flow of blood out of the right heart pumping chamber (the right ventricle) to the lungs, is narrower than normal. This means the right heart pump has to work harder to push blood through the narrowed valve to get to the lungs.

3] Ebstein's anomaly

Ebstein's anomaly is a rare form of congenital heart disease, where the valve on the right side of the heart (the tricuspid valve), which separates the right atrium and right ventricle, doesn't develop properly. This means blood can flow the wrong way within the heart, and the right ventricle may be smaller and less effective than normal.

4] Coarctation of the aorta

Coarctation of the aorta is where the main artery 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 defects – such as a 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

5] Tricuspid atresia

Tricuspid atresia is where the tricuspid heart valve hasn't formed properly. The tricuspid valve separates the right-sided collecting chamber (atrium) and pumping chamber (ventricle). Blood can't flow properly between the chambers, which causes the right pumping chamber to be underdeveloped.