

NAME:- IBE CHIAMAKA ALMA

MATRIC NO:- 18/mhs01/171

DEPARTMENT:- ANATOMY

COURSE:- ANA 202

#### ASSIGNMENT

- A. Describe the heart and its functions using the video given
- B. Write on 5 different congenital anomalies of the heart.

#### ANSWER

##### **A. Describe the heart and its functions**

The heart is a muscle about the size of the human fist. It lies behind into the left side of the breast bone or sternum. The heart is divided into 4; The first top 2 is the atria and are the collection chamber of blood. The bottom 2 is the ventricle and they receive blood from the atria and pumps to the lungs and the body.

The chambers of the heart are separated by valves. There are 4 valves in the heart which are i. The tricuspid valve, ii. The pulmonary valve, iii. Mitral valve, iv. Aortic valve. The circulation of the heart begins at the right side. On the right side, the tricuspid valve separates the right atrium and right ventricle allowing blood to enter the ventricle but not to the atrium. Blood flows from the pulmonary valve to go to the lungs. On the left side the mitral valve separates the left atrium and the left ventricle.

Arteries carries blood and nutrients to the body and veins takes blood to the heart which then pumps it to the lungs to be oxygenated. The left coronary artery splits into two vessels, one supplies blood to the front of the heart and the other supplies blood to the left side of the heart. The pumping of the heart is being controlled by electric signals

##### FUNCTIONS OF THE HEART

- a. The heart pumps blood to the body.
- b. Heart arteries provide oxygen and nutrients to the heart muscle.
- c. Right coronary arteries provides blood to the bottom and the back of the heart.
- d. The left atrium receives blood from the vein and pumps it to the right ventricle.
- e. The right ventricle receives blood from the right atrium and pumps it to the lungs.

##### **B. 5 different congenital anomalies of the heart**

1. Atrial Septal Defect (ASD)

An ASD is a hole in the wall between the upper chambers, or the right and left atria, of your heart. A hole here lets blood from the left atrium mix with blood in the right atrium. Some ASDs close on their own. A doctor may need to repair a medium or large ASD with open-heart surgery or another procedure. He/she might seal the hole with a minimally invasive catheter procedure and inserts a small tube, or catheter, in your blood vessel all the way to your heart. Then he can cover the hole with a variety of devices.

## 2. Ventricular Septal Defect (VSD)

A VSD is a hole in the part of your septum that separates your heart's lower chambers, or ventricles. If you have a VSD, blood gets pumped back to your lungs instead of to your body.

## 3. Complete Atrioventricular Canal Defect (CAVC)

This is the most serious septal defect. It's when you have a hole in your heart that affects all four chambers. A CAVC prevents oxygen-rich blood from going to the right places in your body. Your doctor can repair it with patches. But some people need more than one surgery to treat it.

## 4. Valve Defects

Valves control the flow of blood through your heart's ventricles and arteries. And some minor heart defects can involve the valves, including:

Stenosis. When your valves become narrow or stiff, and won't open or allow blood to pass easily.

## 5. Hole in the Heart (Septal Defect)

This means you're born with a hole in the wall, or septum, that separates the left and right sides of your heart. The hole lets blood from the two sides mix.