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A) The superior Vena Cava and inferior Vena Cava bring venous blood from various parts of the body to the heart. The venous blood fills the right atrium. When it is full, the right atrium contracts, sending blood to the right ventricle.

B) Now the right ventricle contracts. This sends blood to the lungs through the pulmonary trunk. The blood gets oxygenated in the lungs. The oxygenated blood is carried by the pulmonary veins to the left atrium.

C) Now the left atrium contracts and sends blood to the left ventricle.

D) Now the left ventricle contracts and sends blood into the aorta. This blood is circulated throughout the body.

2)

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 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.

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 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.

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.

Ebstein's anomaly can occur on its own, but it often occurs with an atrial septal defect.

Patent ductus arteriosus

As a baby develops in the womb, a blood vessel called the ductus arteriosus connects the pulmonary artery directly to the aorta. The ductus arteriosus diverts blood away from the lung (which isn't working normally before birth) to the aorta.

A patent ductus arteriosus is where this connection doesn't close after birth as it's supposed to. This means that extra blood is pumped into the lungs, forcing the heart and lungs to work harder.

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.