



The module: Cardiovascular system

Session 2, Lecture 1

Duration : 1 hr

Early Development of the Cardiovascular System

Module staff:

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As in work book



For more discussion, questions or cases need help please post to the session group



Learning outcomes:

1-Describe the formation and looping of the primitive heart tube. (LO1)

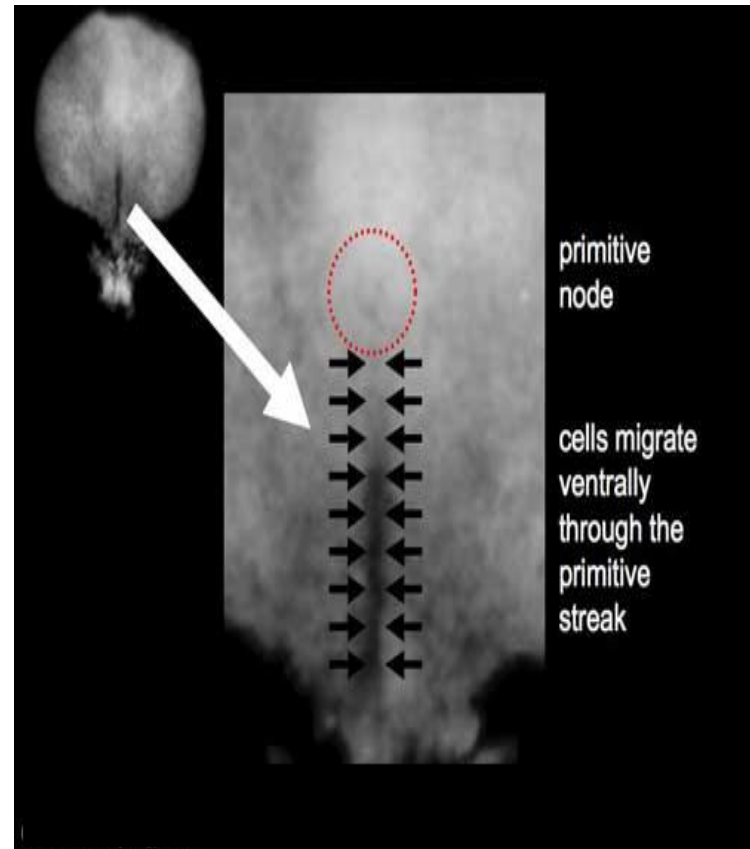
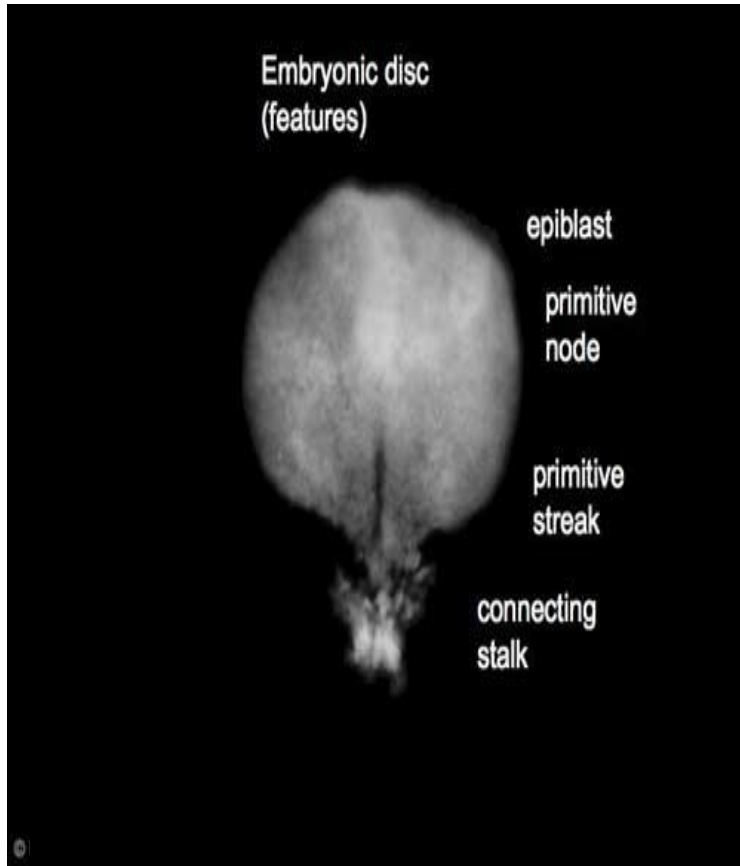
2-Name the regions of the developing heart. (LO2)

3-Describe in brief the development of the great vessels. (LO3)



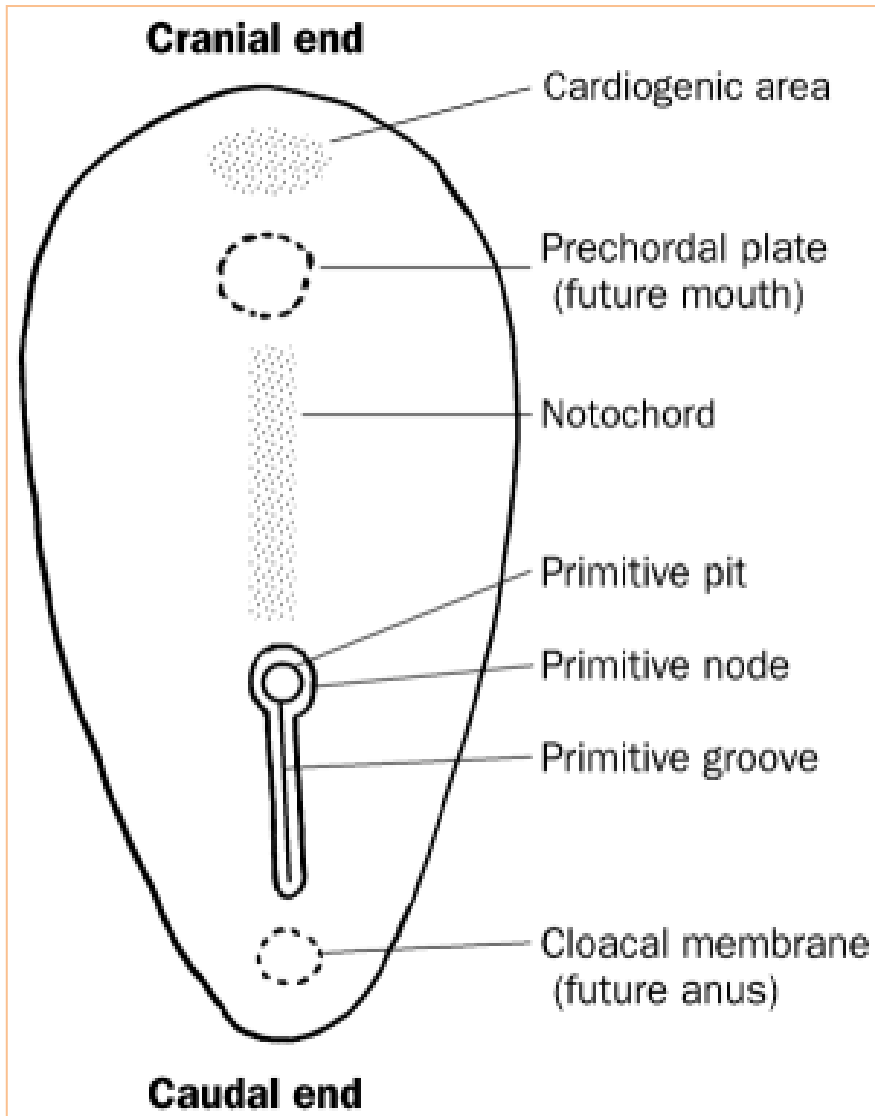
Gastrulation and the cardiogenic field

LO1



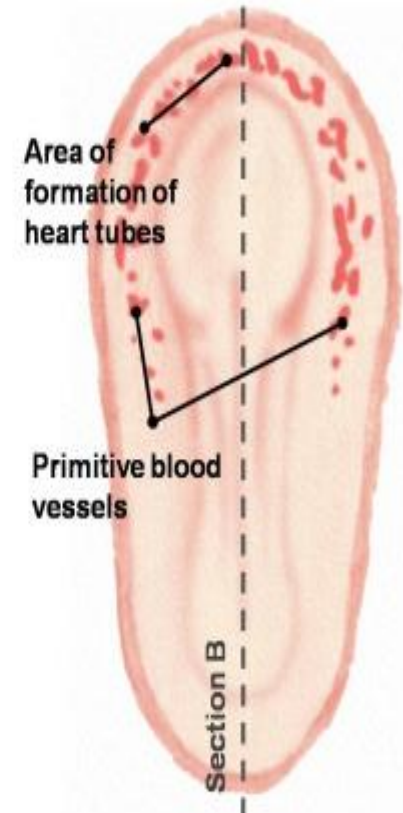
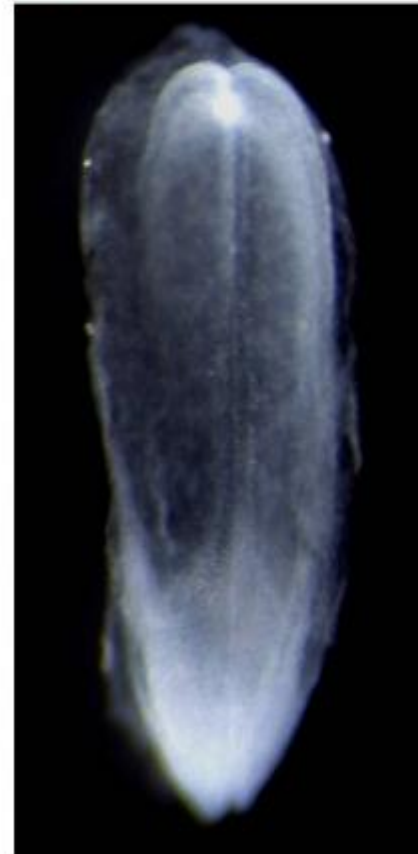
Gastrulation and the cardiogenic field

LO1



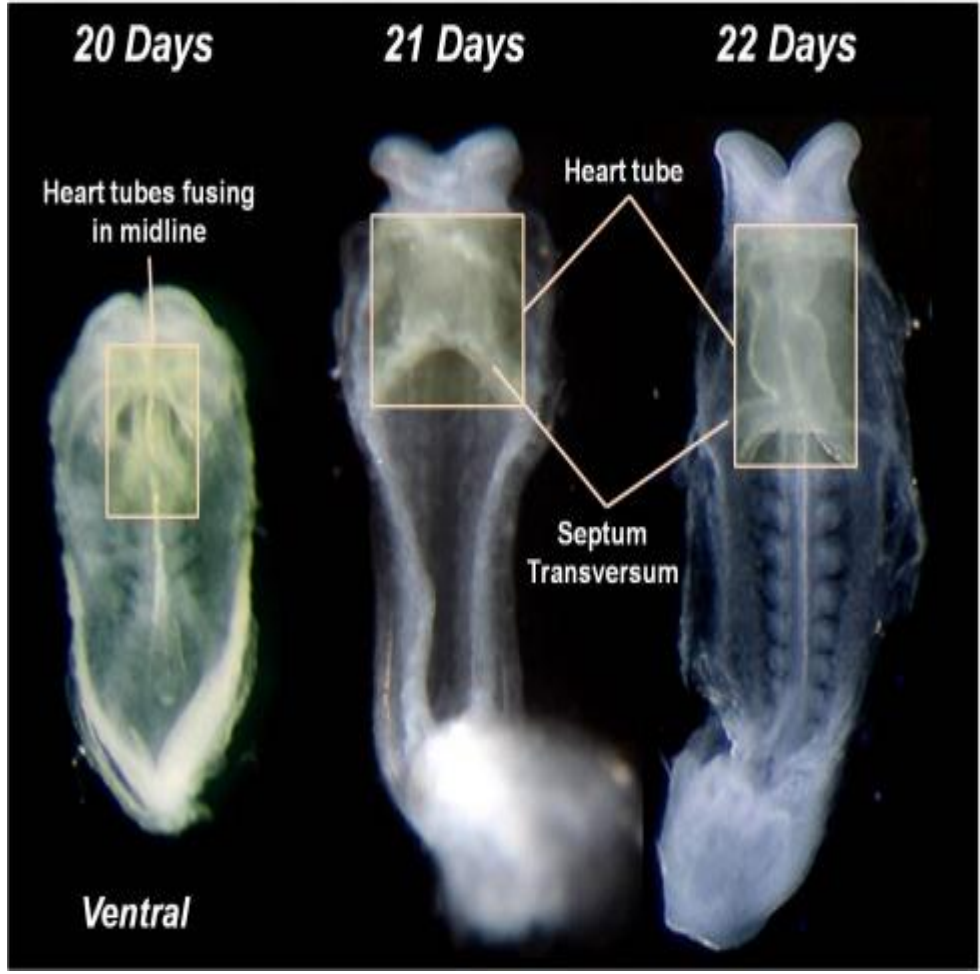
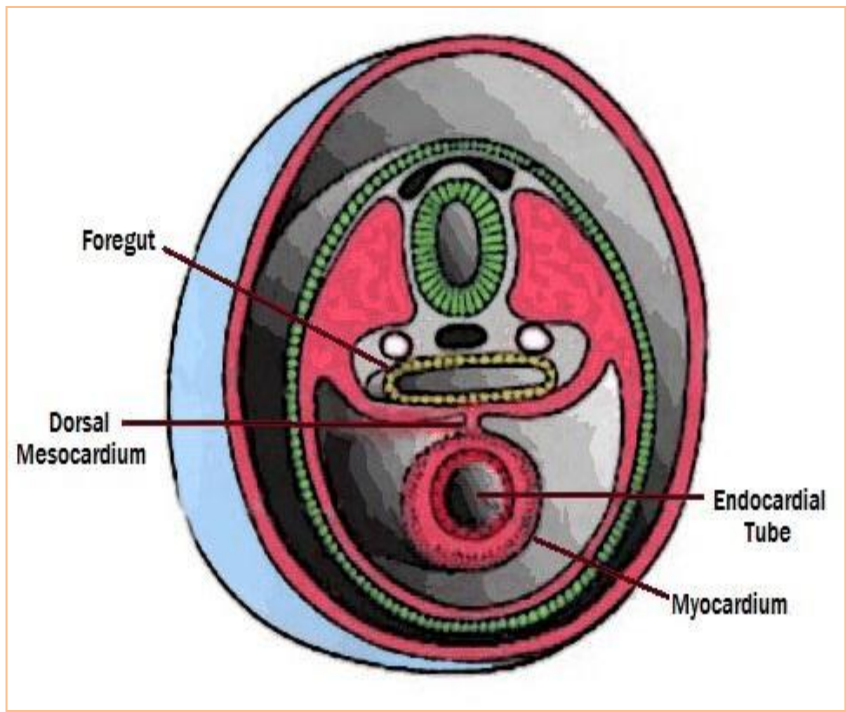
Embryo approximately 18 Days

A Dorsal view

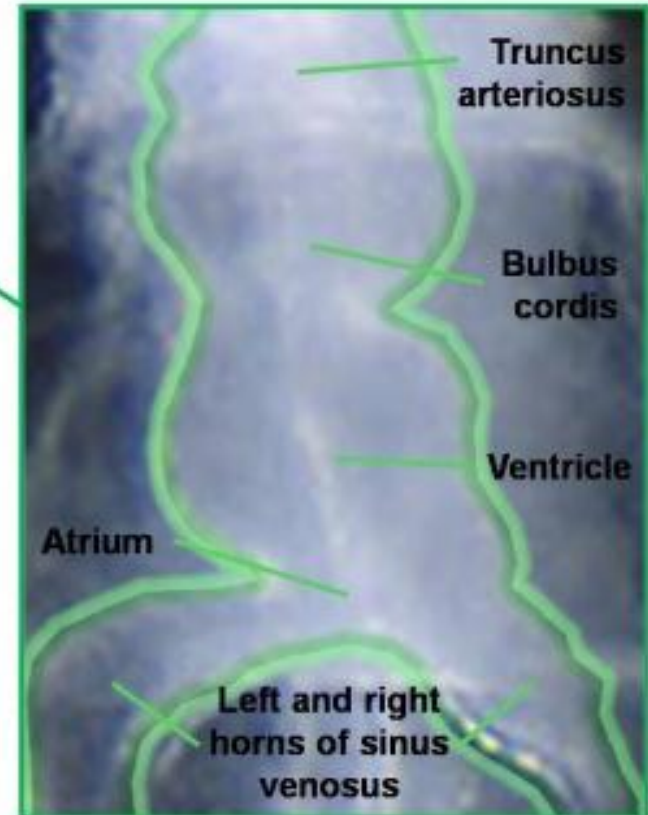
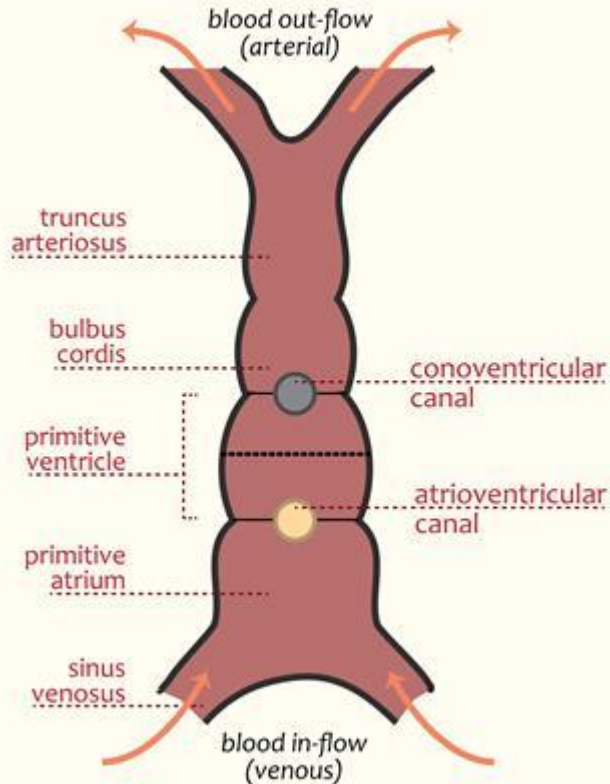


The formation of heart tubes

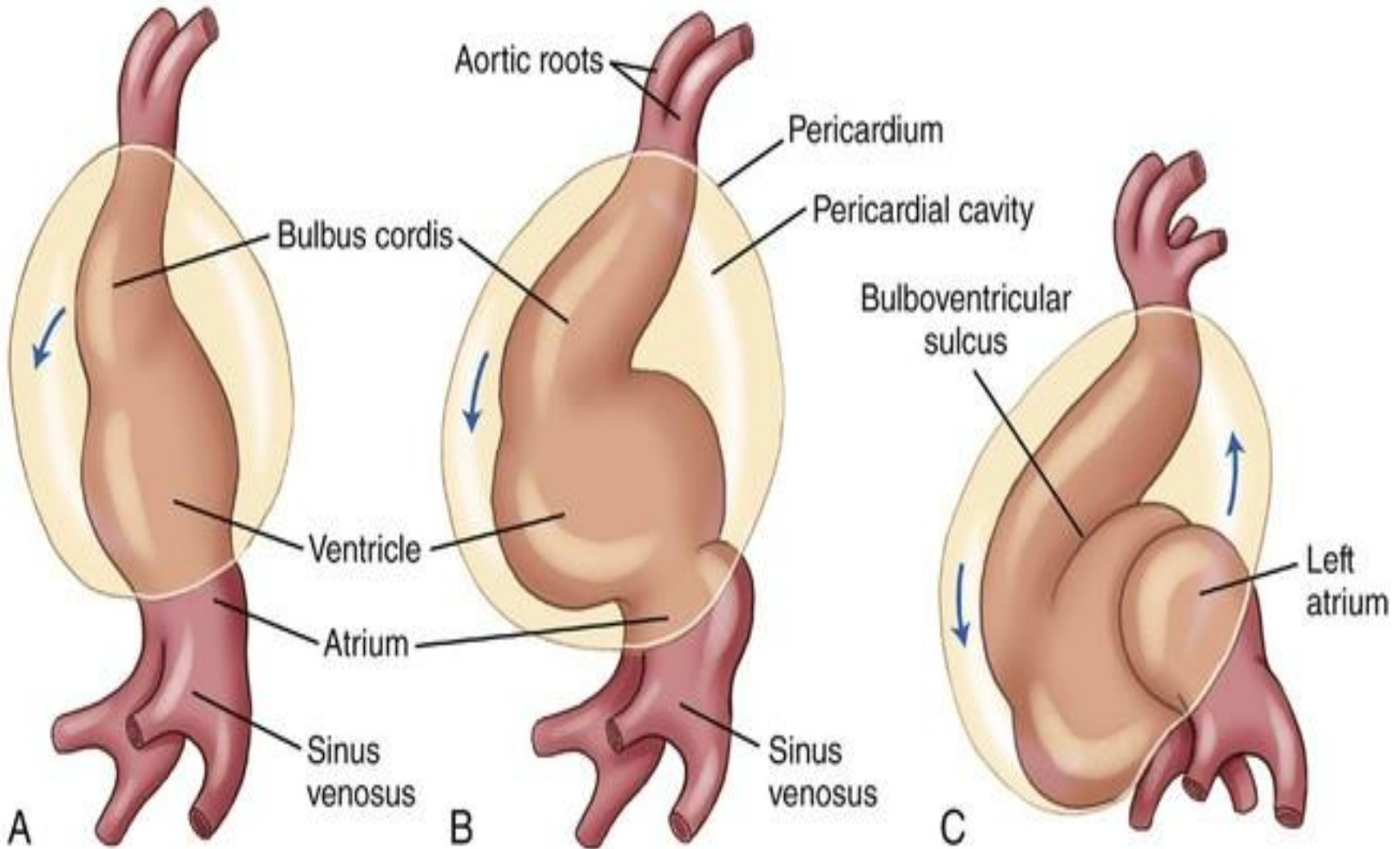
LO1



Embryonic Structures



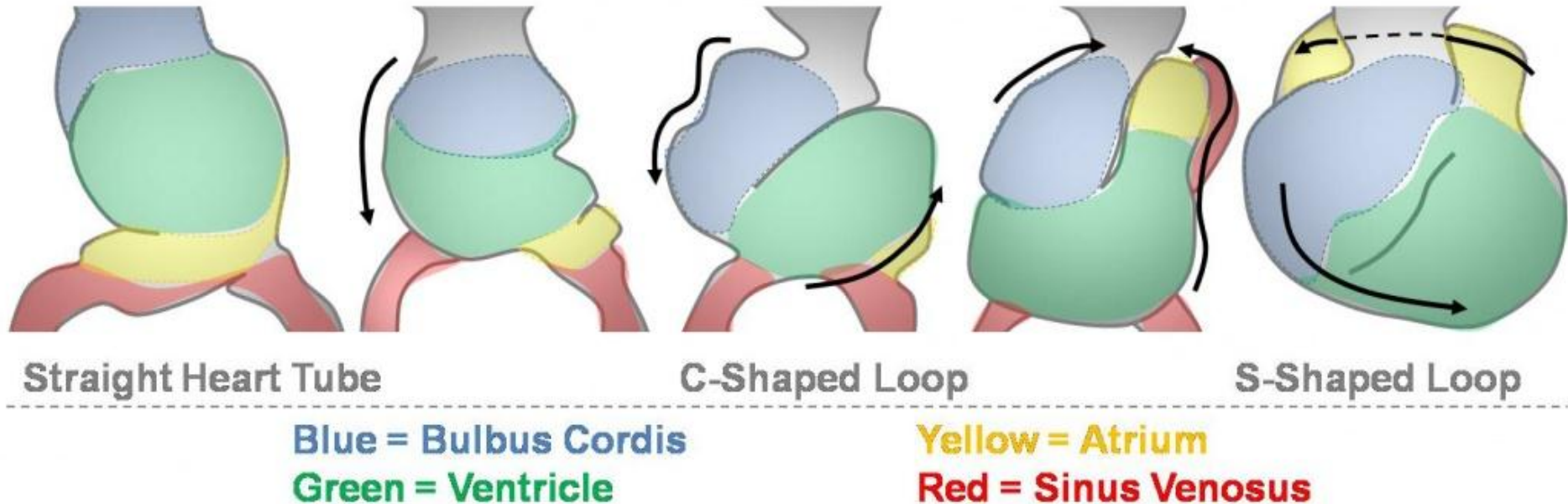
The primitive heart tube



Looping of the primitive heart tube and development of the great vessels

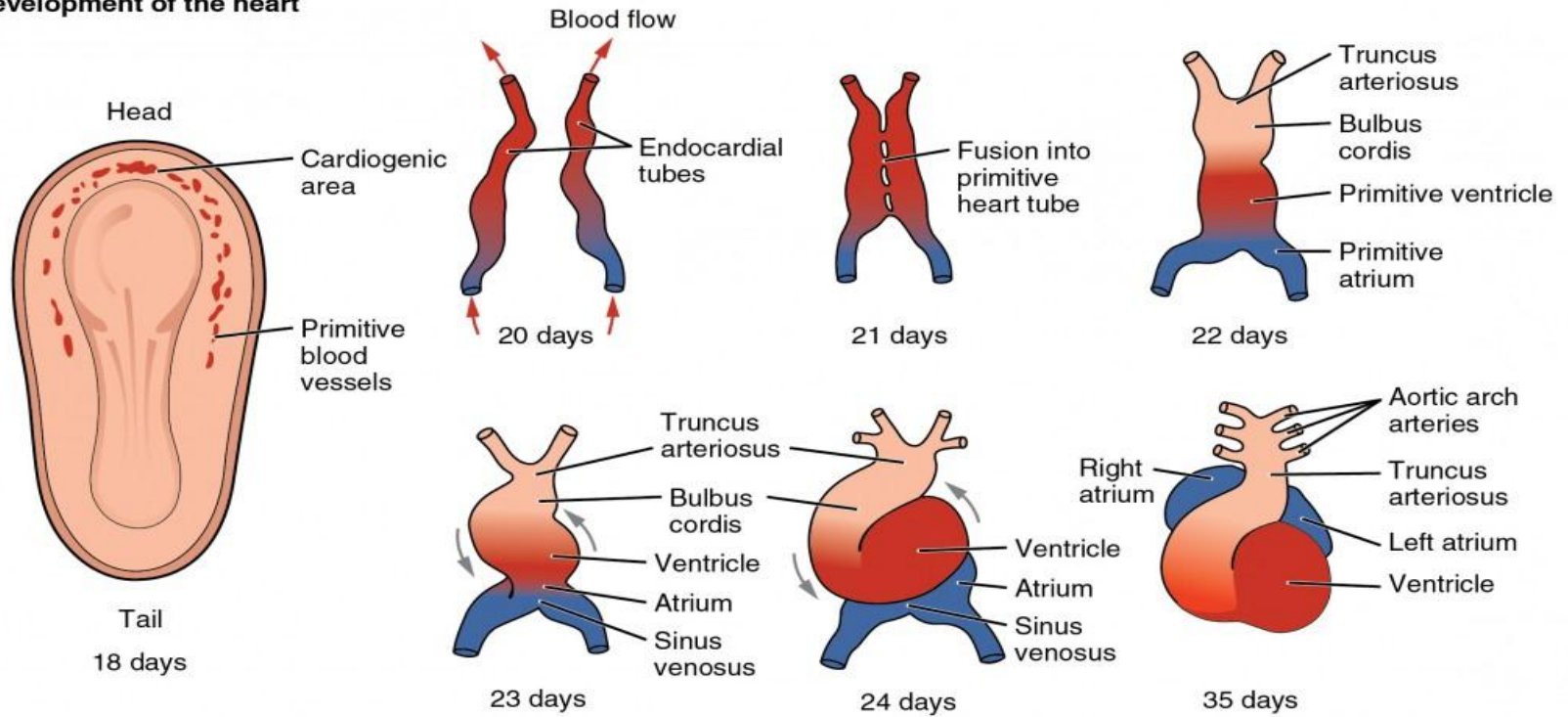
LO3

Sequence of Events in Looping

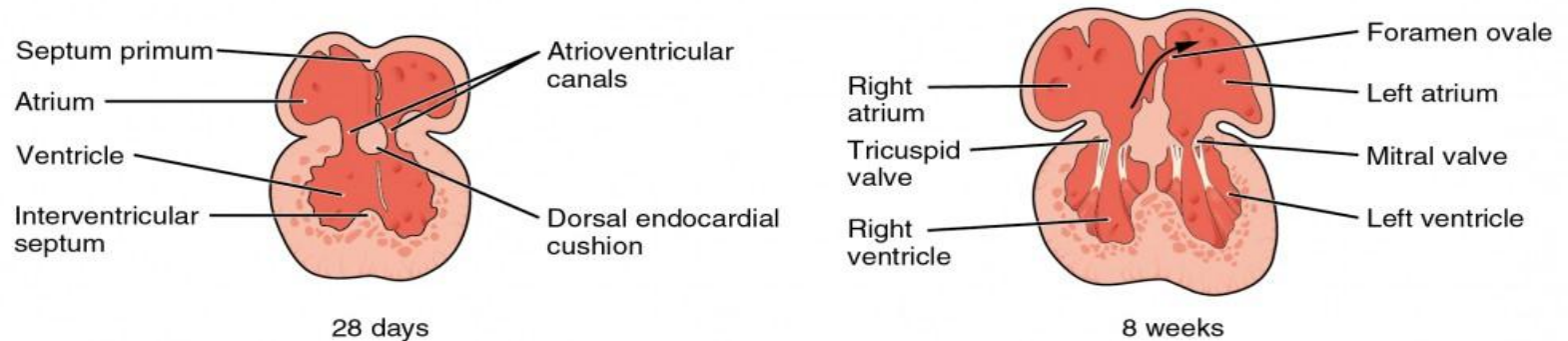


Looping places both the inflow and outflow cranially with the inflow dorsal to (behind) the outflow.

Development of the heart



Partitioning of the heart into four chambers



Embryonic vs. adult heart structures

LO3

Embryological dilation	Adult structures
Primitive atrium	Trabeculated part of right and left atria
Primitive ventricle	Trabeculated part of left ventricle
Bulbus cordis	Part of right ventricle
Truncus arteriosus	roots and proximal portions of the pulmonary trunk and aorta.

