HEART DISSECTION

The external structure-

The figure given below depicts the evolution of aortic arch in vertebrates. Observe and understand the figure and try to find the left and right side of the heart.

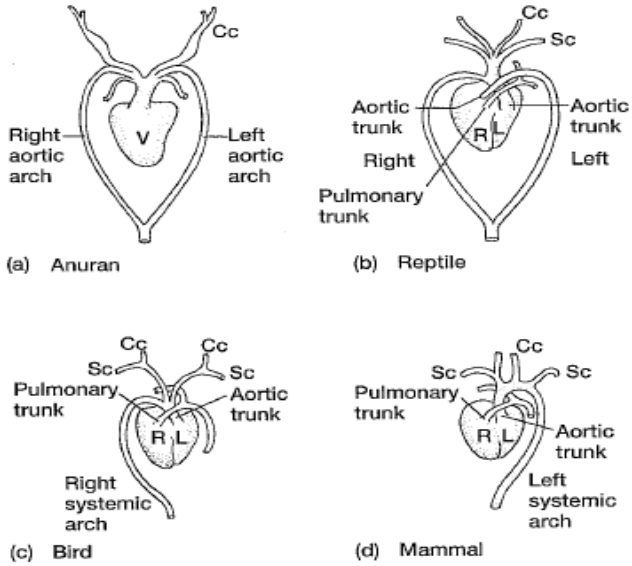
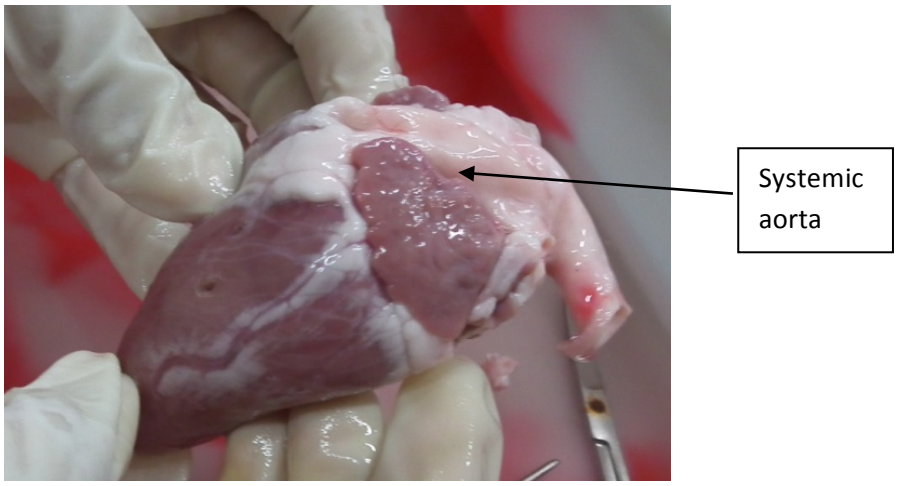


FIGURE 12.20 Fate of the systemic arches in tetrapods (ventral views). Systemic arches of both sides persist in the adult in anurans (a) and reptiles (b). The right systemic arch persists in birds (c), and the left in mammals (d). Abbreviations: common carotid (Cc), left ventricle (L), right ventricle (R), subclavian (Sc), ventricle (V).



Identify the ***left and the right side*** of the heart. Can you differentiate the right and left auricle?

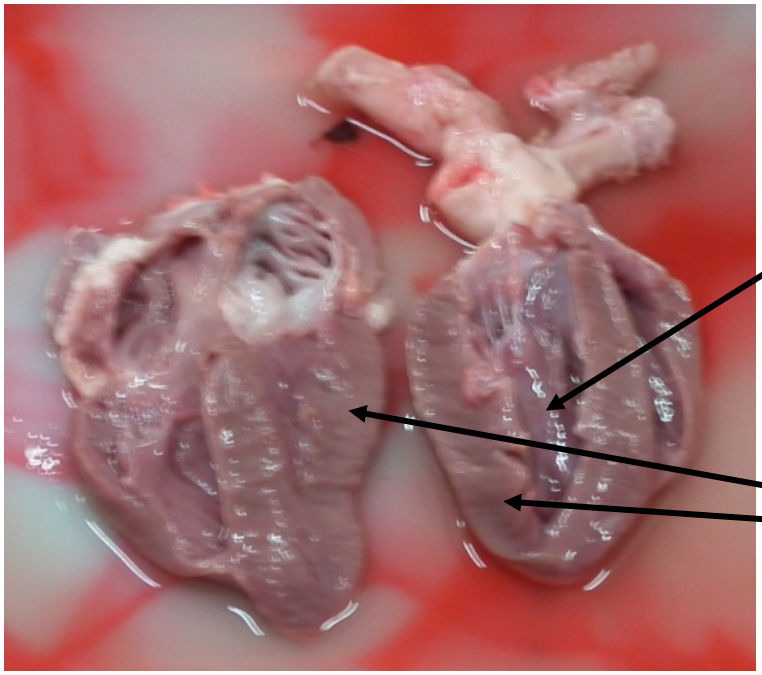
Can you differentiate the ***atrio- ventricular groove***?.....Where to look for it?....The demarcation between the auricle and ventricle.

How many vessels can you see? Try to identify the vessels…… Remember there is only one aorta, the pulmonary trunk branches to form the right and left pulmonary branches, what about the vena cava and pulmonary veins?

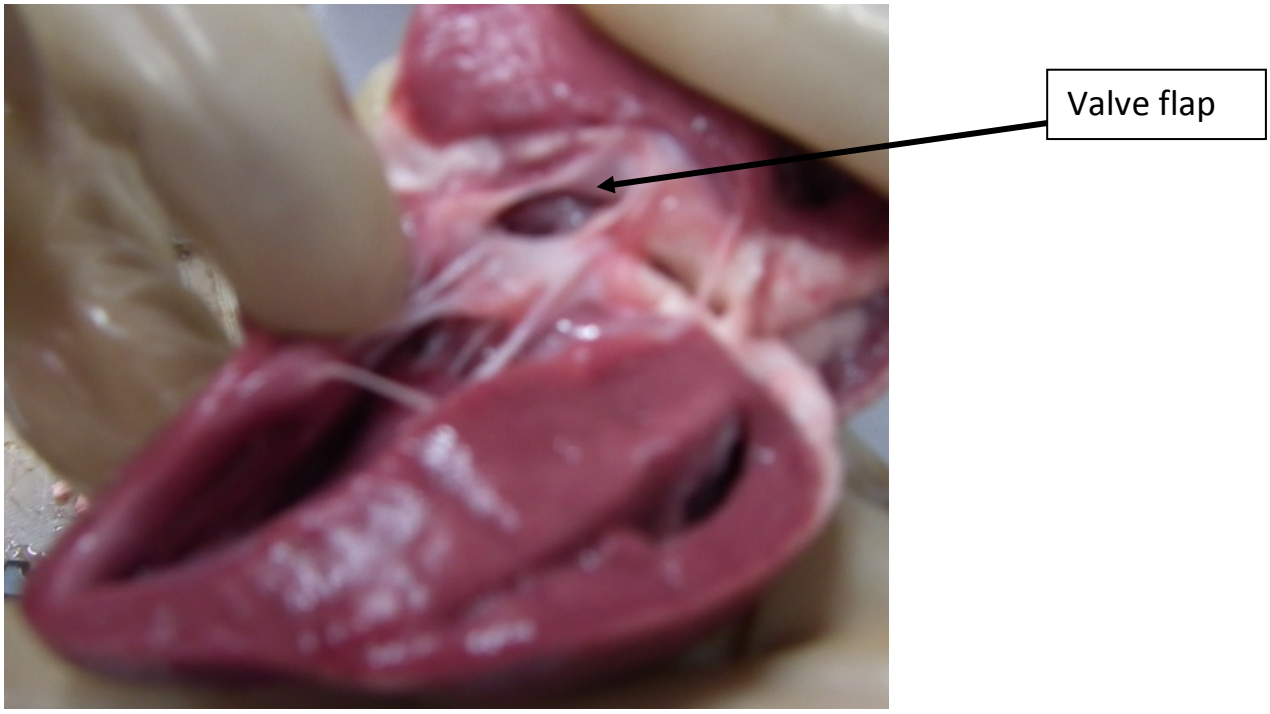
The blood vessels that supply blood to the heart muscle are ***coronary vessels***. Try to locate these and find the origin of these vessels.

Cut the heart longitudinally.

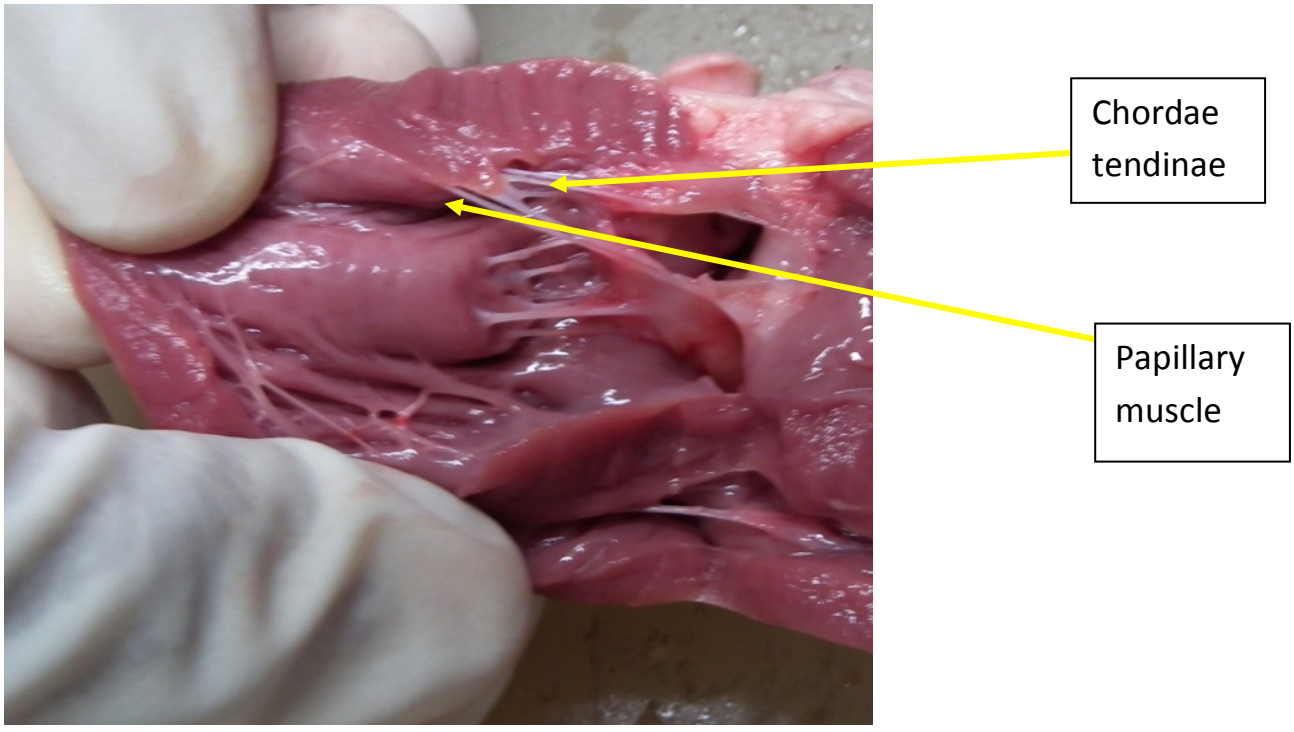
Observe the cut portion and identify the *right and left ventricle*. Observe the difference between walls of the left and the right ventricle. (the left is thicker)



Observe the ***atrio-ventricular valves***. Can you identify the ***flaps***?



The structures that prevent the overturning of the flaps – ***chordae tendinae***.



The ***papillary muscles*** are the elevations of the ventricular wall on which the chordate tendinae are attached.