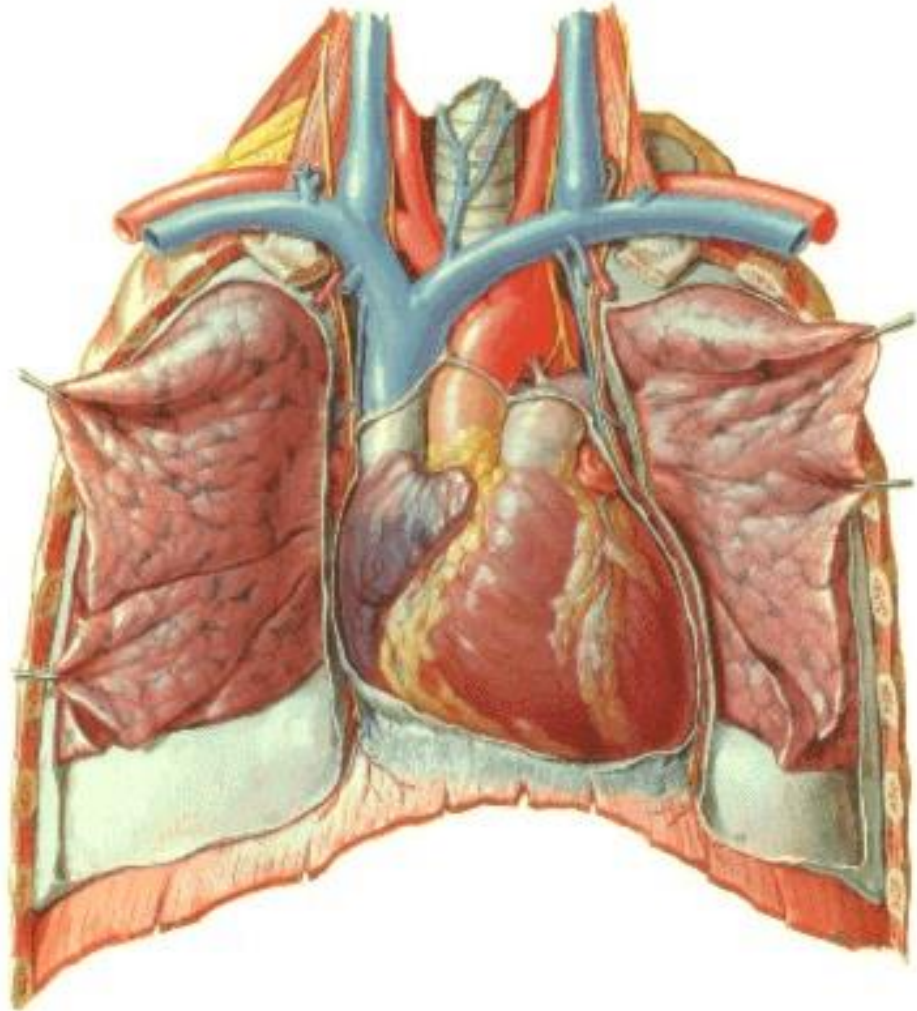
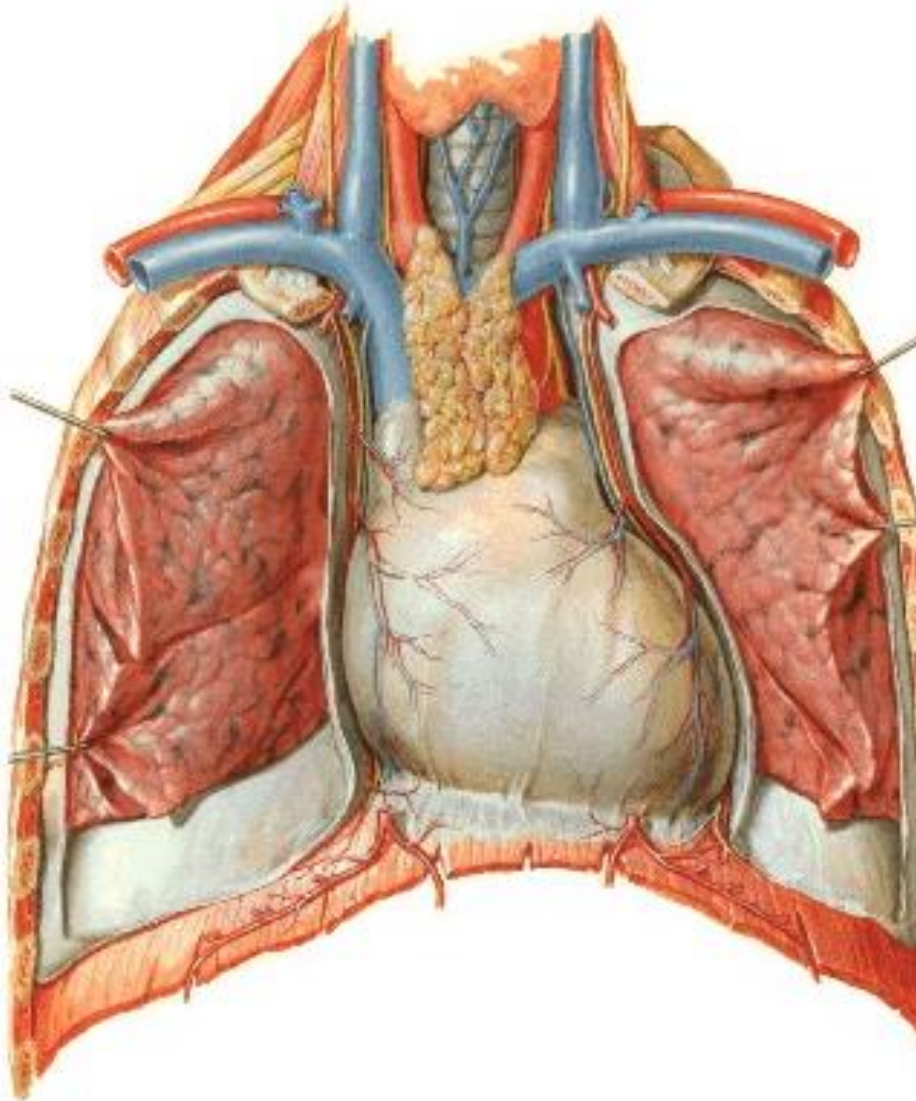


HEART

COR



Atrium
Ventriculus



Septum interatriale
Septum interventriculare



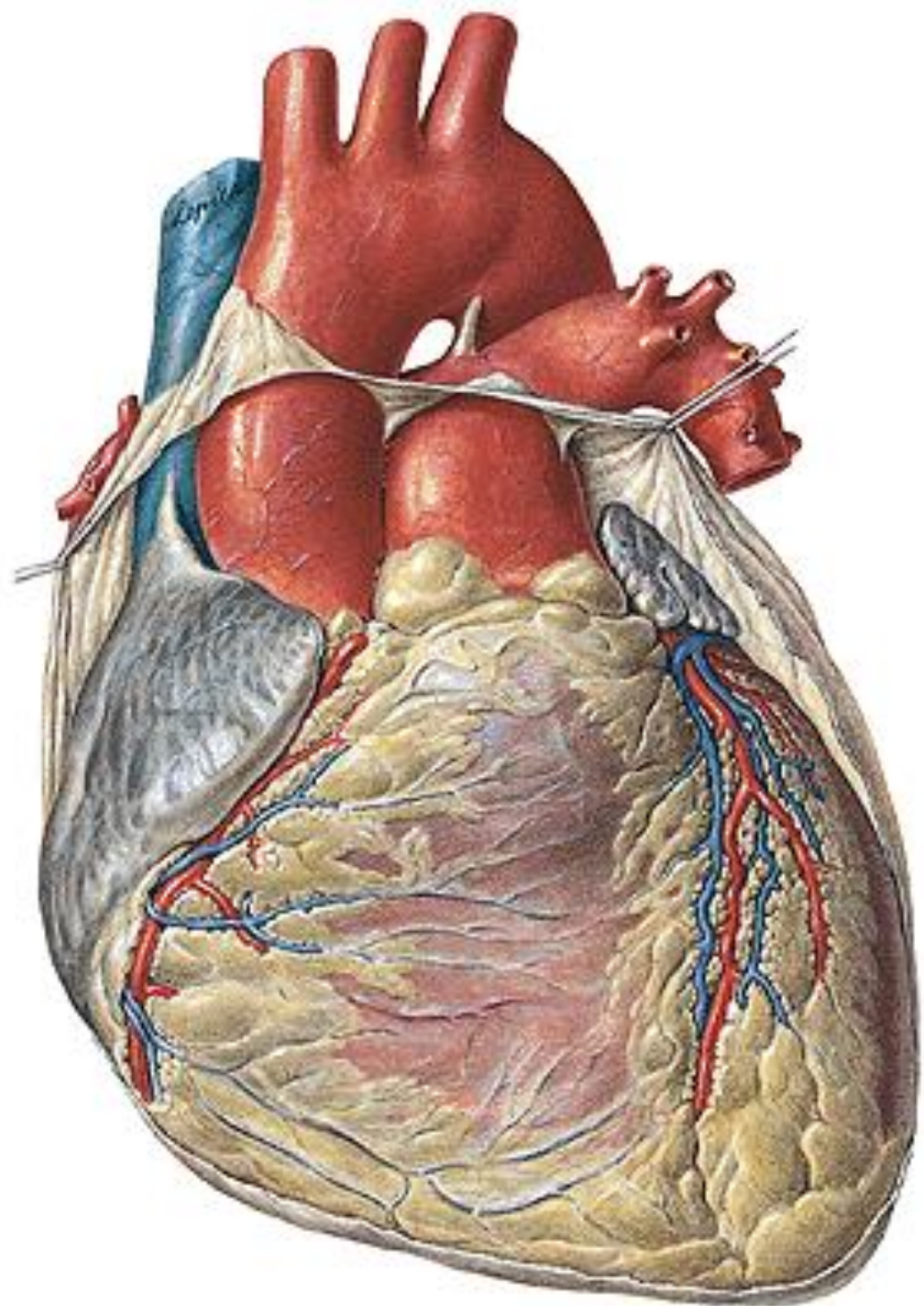
COR

Atrium dextrum

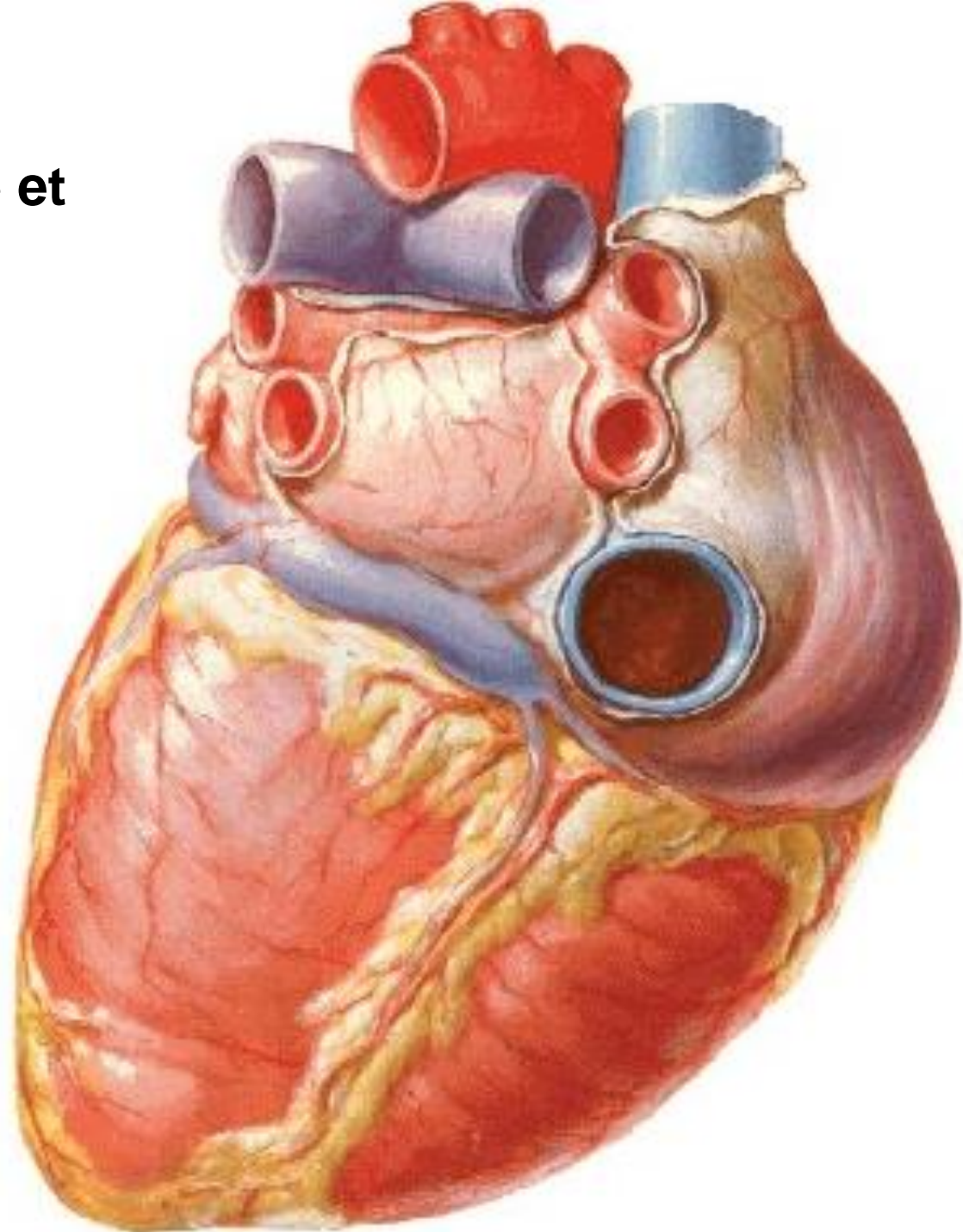
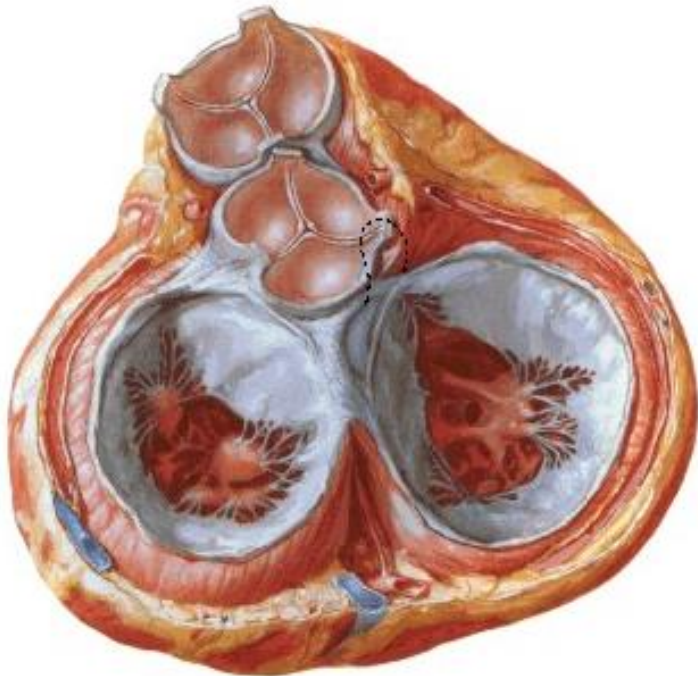
- vena cava sup. et inf.

Ventriculus dexter

- truncus pulmonalis



Atrium sinistrum
vv. pulmonales dextrae et
sinistrae
Ventriculus sinister
- aorta



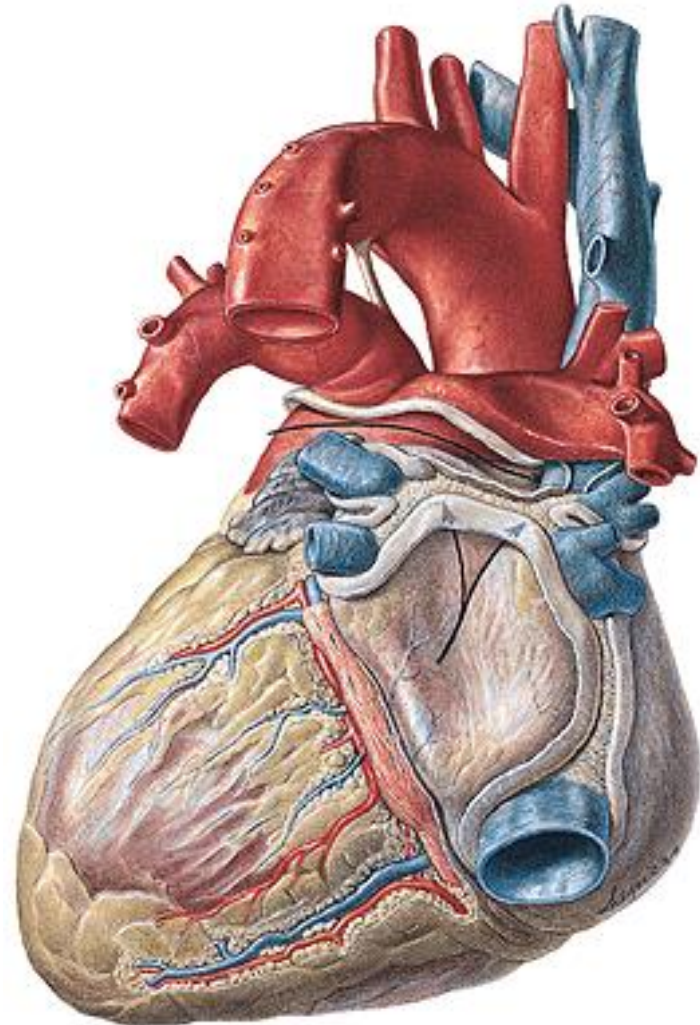
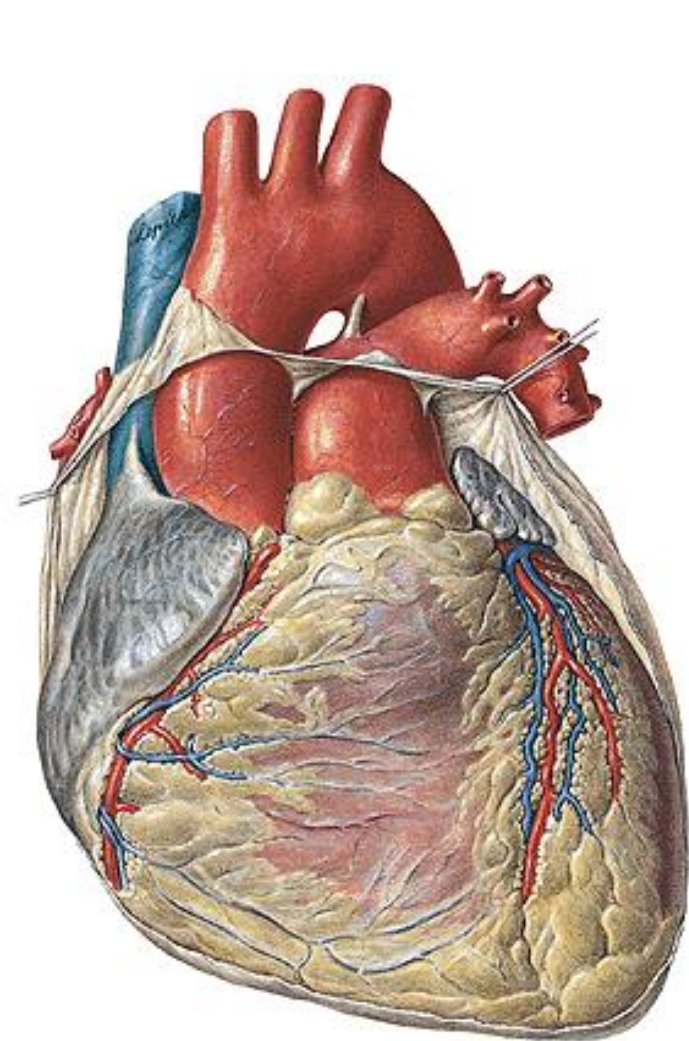
Basis, apex

Facies sternocostalis et diaphragmatica

Margo dexter (acutus) et sinister (obtusus, facies pulmonalis)

Sulcus coronarius, sulcus interventricularis ant. et post.

Auricula dextra et sinistra



ATRIUM DEXTRUM

**Septum interatriale –
fossa ovalis – limbus fossae ovalis**

Ostium v. cavae sup.

**Ostium v. cavae inf. –
valvula v. cavae inf.**

**Ostium sinus coronarii –
valvula sinus coronarii**

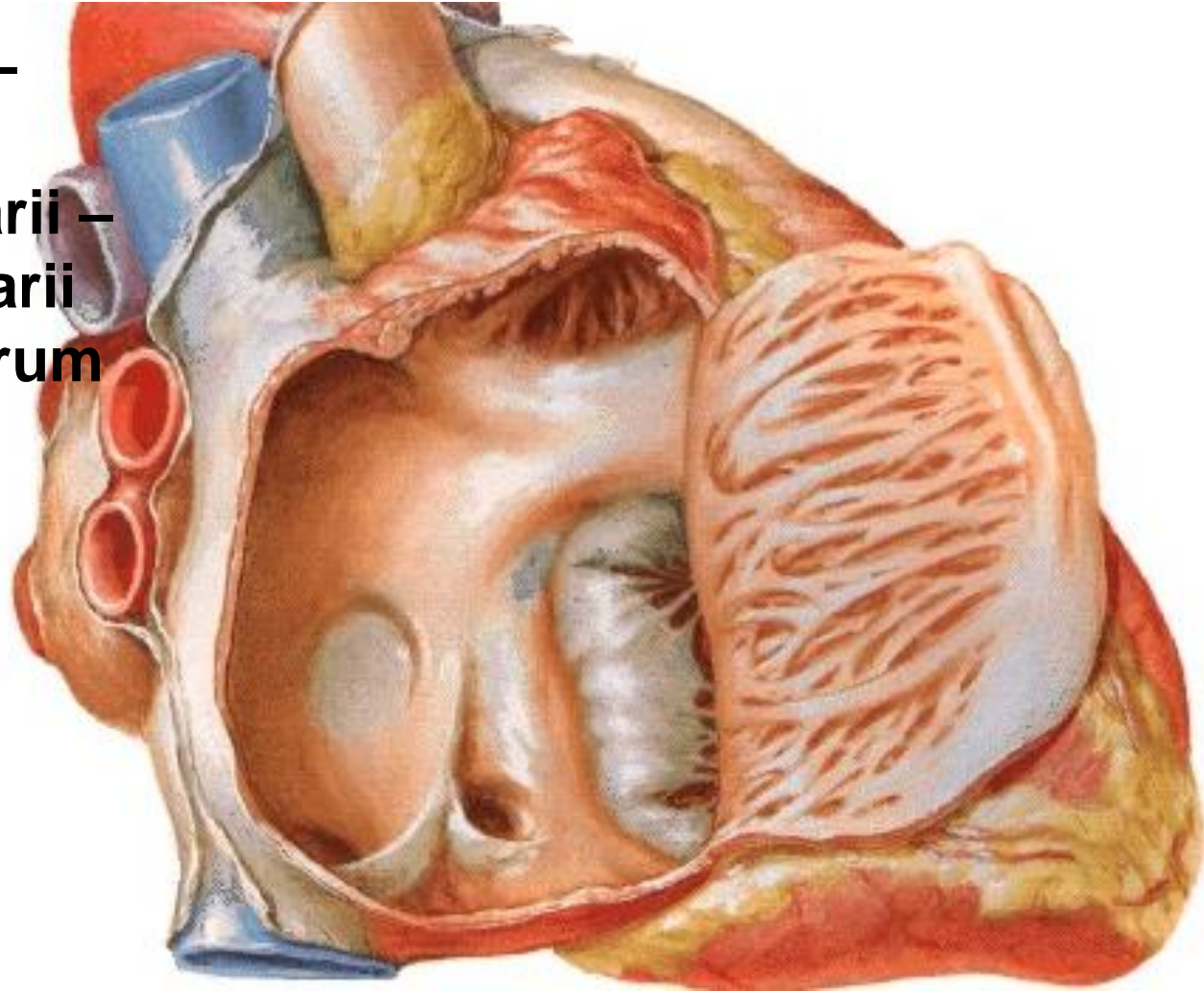
Sinus venarum cavarum

Torus intervenosus

Crista terminalis

**Auricula dextra –
musculi pectinati**

Valva tricuspidalis



VENTRICULUS DEXTER

Pars trabecularis - trabeculae carnae

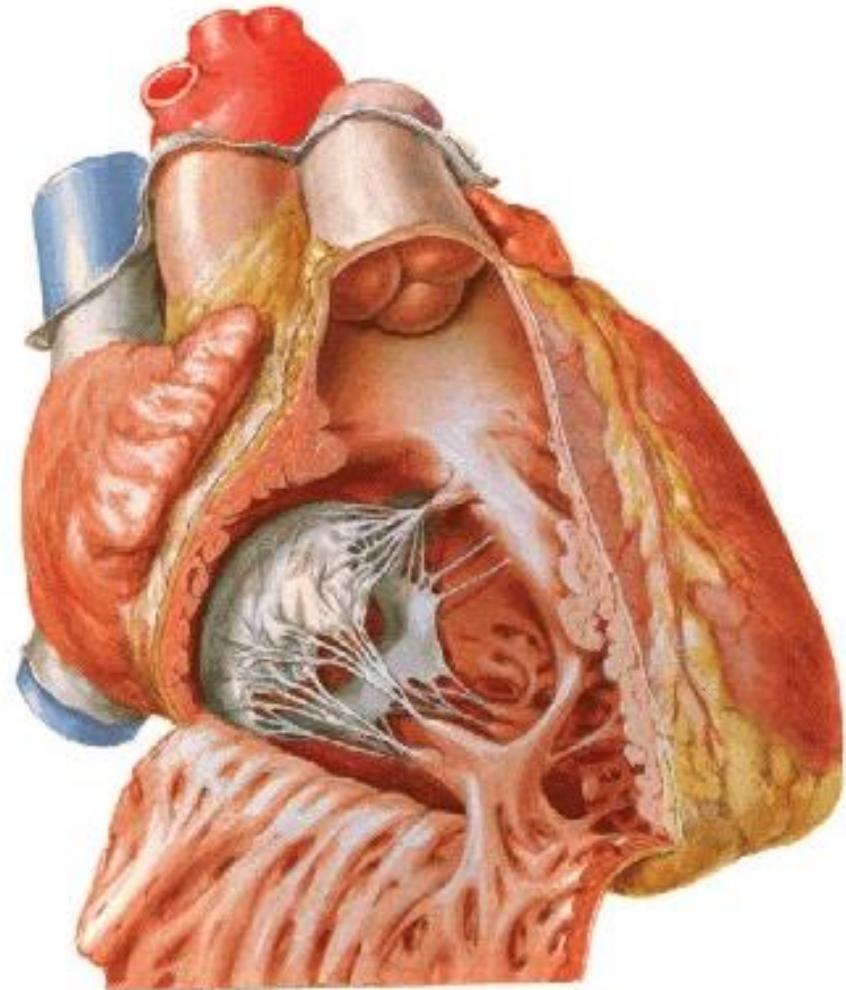
Ostium atrioventriculare dextrum, valva tricuspidalis

– cuspis ant., septalis, post.

Musculi papillares (anterior, posterior, septales)

Trabecula septomarginalis

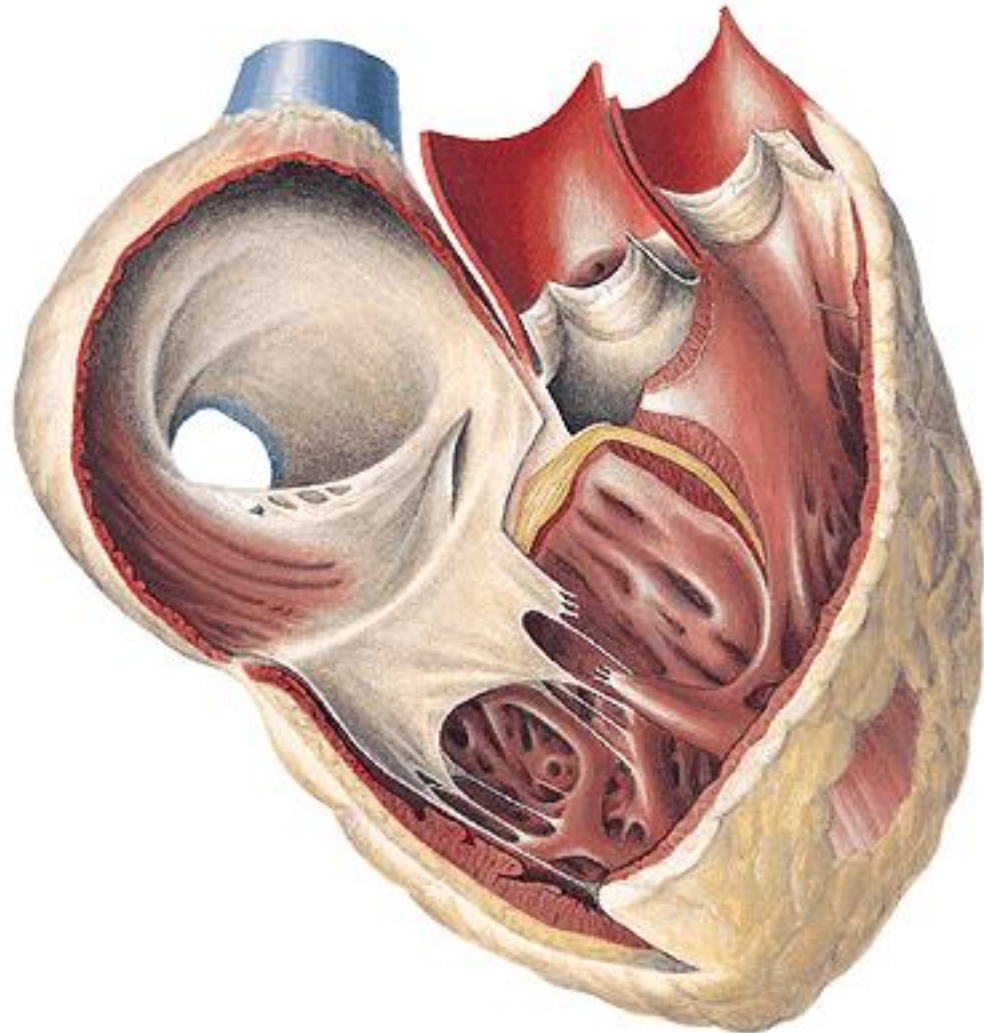
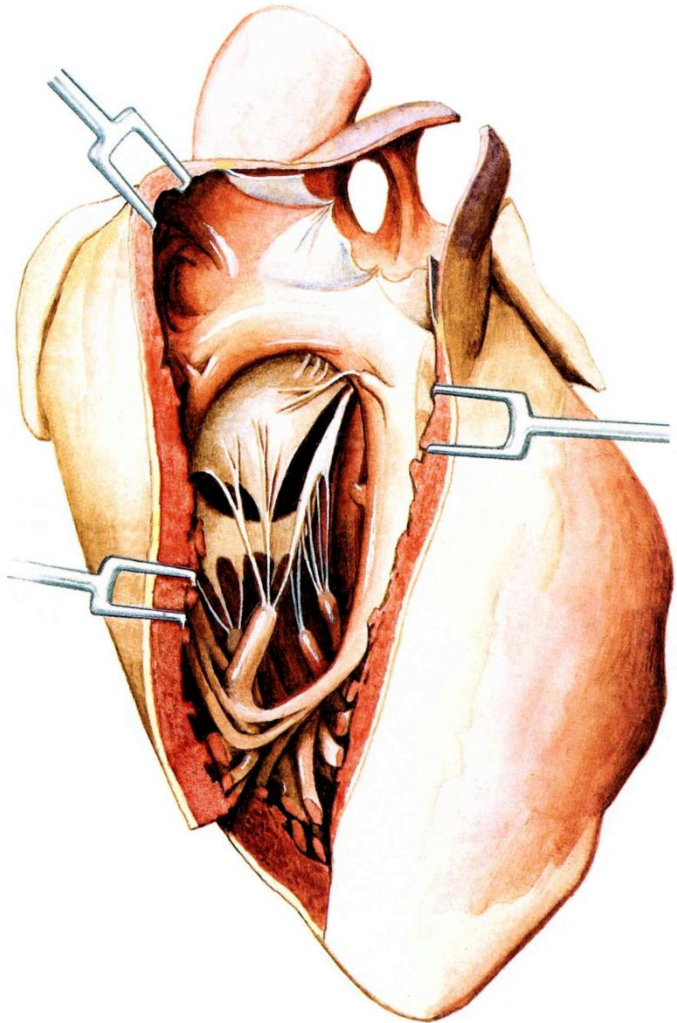
Chordae tendineae



VENTRICULUS DEXTER

Pars glabra – conus arteriosus, crista supraventricularis

Ostium trunci pulmonalis – valva trunci pulmonalis –
valvula semilunaris ant., dx., sin. – lunula, nodulus, sinus



ATRIUM SINISTRUM

Ostia venarum pulmonalium

Auricula sinistra

Musculi pectinati

Septum interatriale –

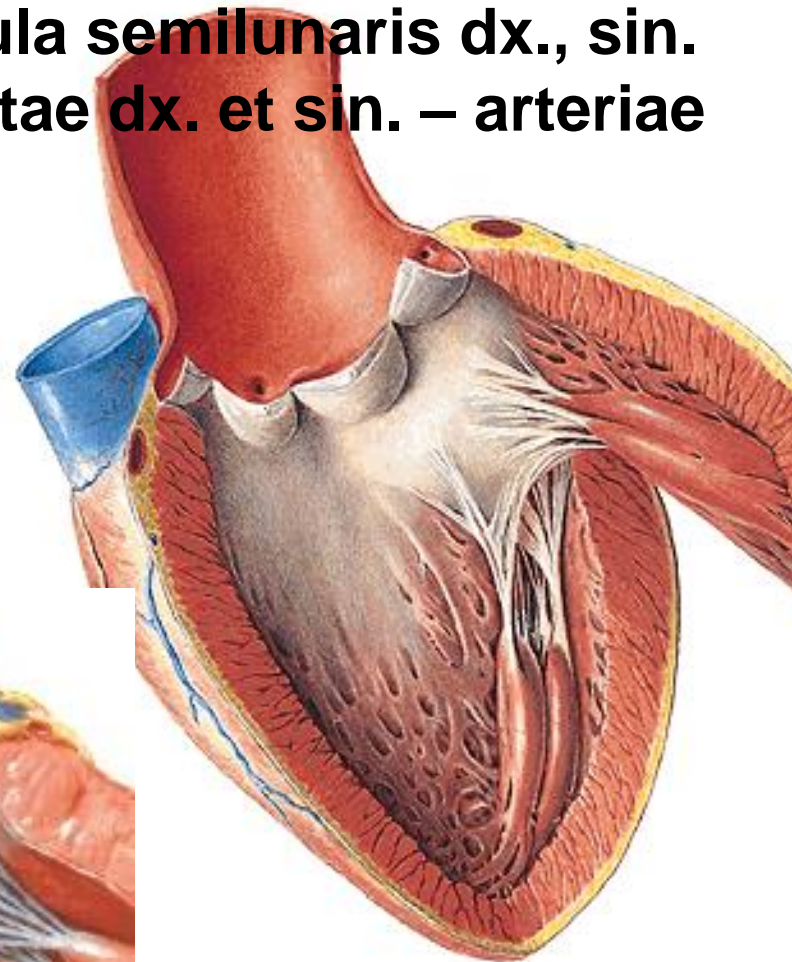
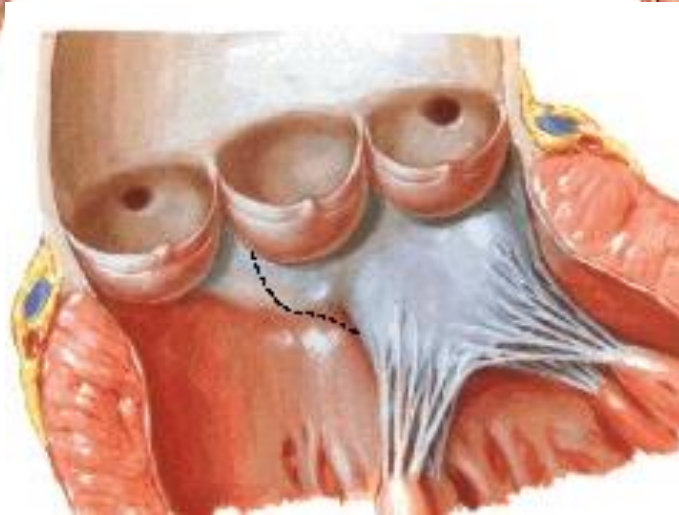
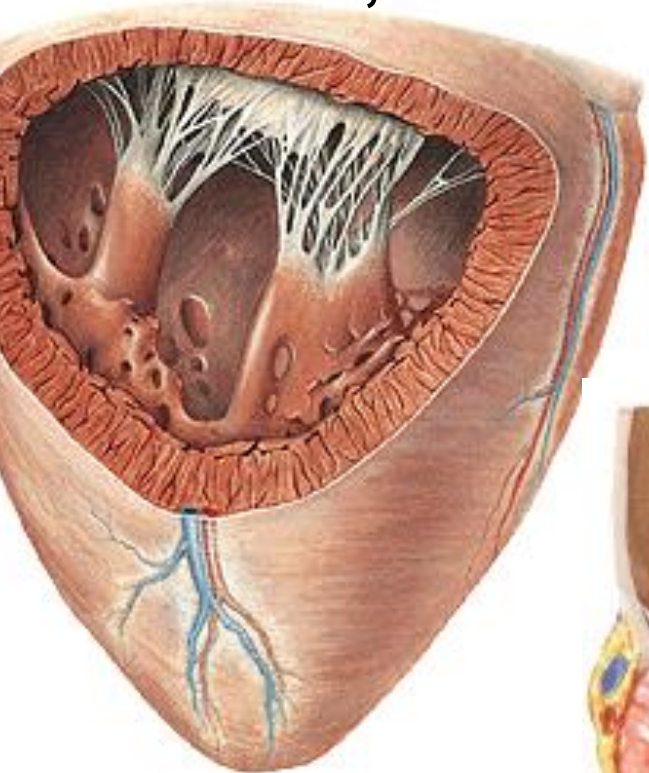
fossa ovalis – falx septi



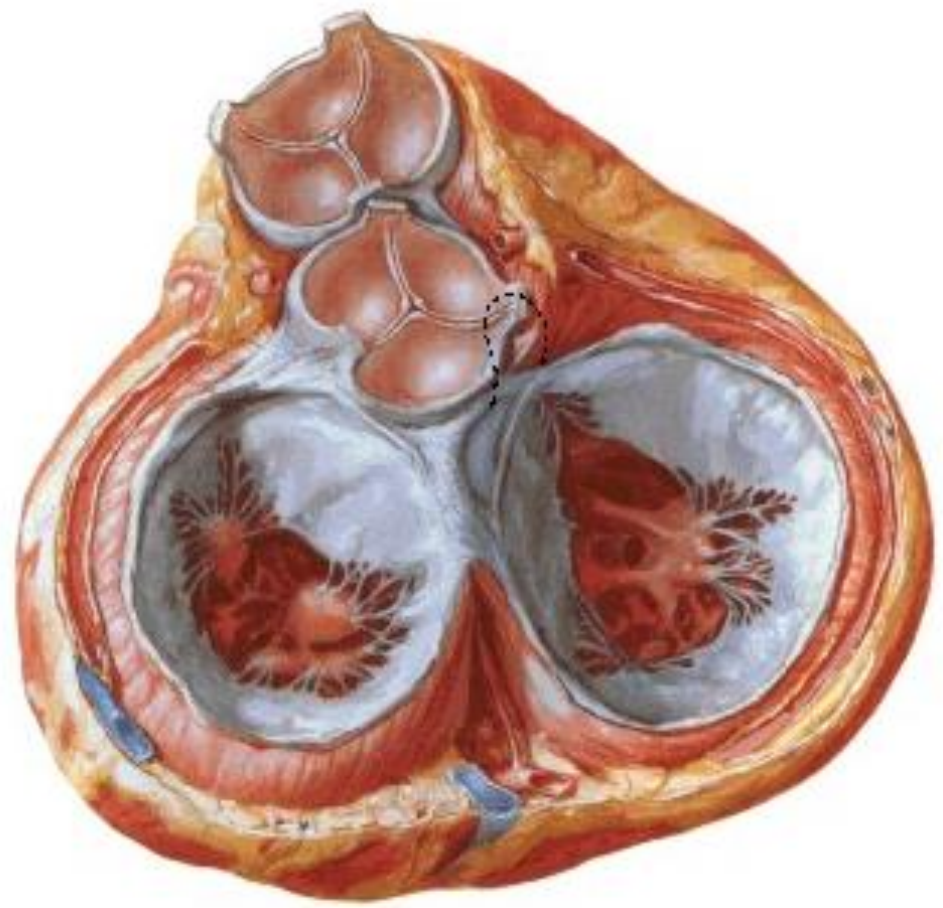
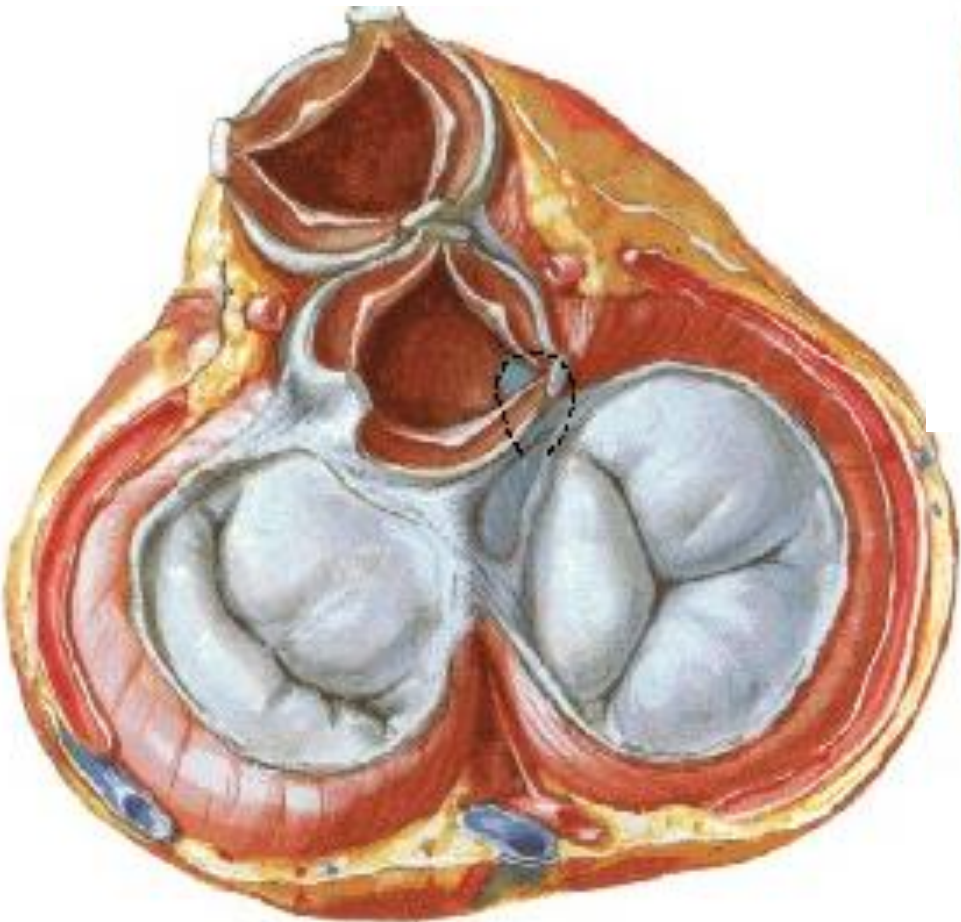
VENTRICULUS SINISTER

Ostium atrioventriculare sin.– valva bicuspidalis (mitralis) –
cuspid ant. et post. – m. papillaris ant. et post. – chordae
tendineae

Ostium aortae – valva aortae – valvula semilunaris dx., sin.
et post. – lunula, nodulus, sinus aortae dx. et sin. – arteriae
coronariae, bulbus aortae

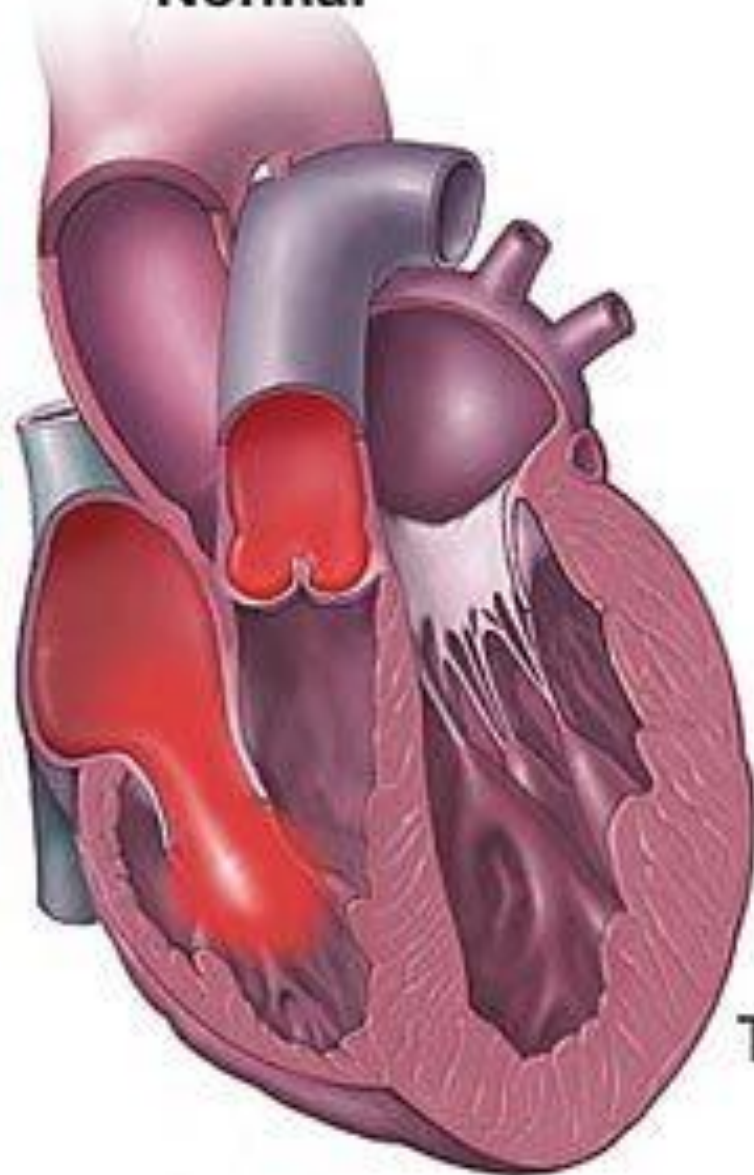


SYSTOLE

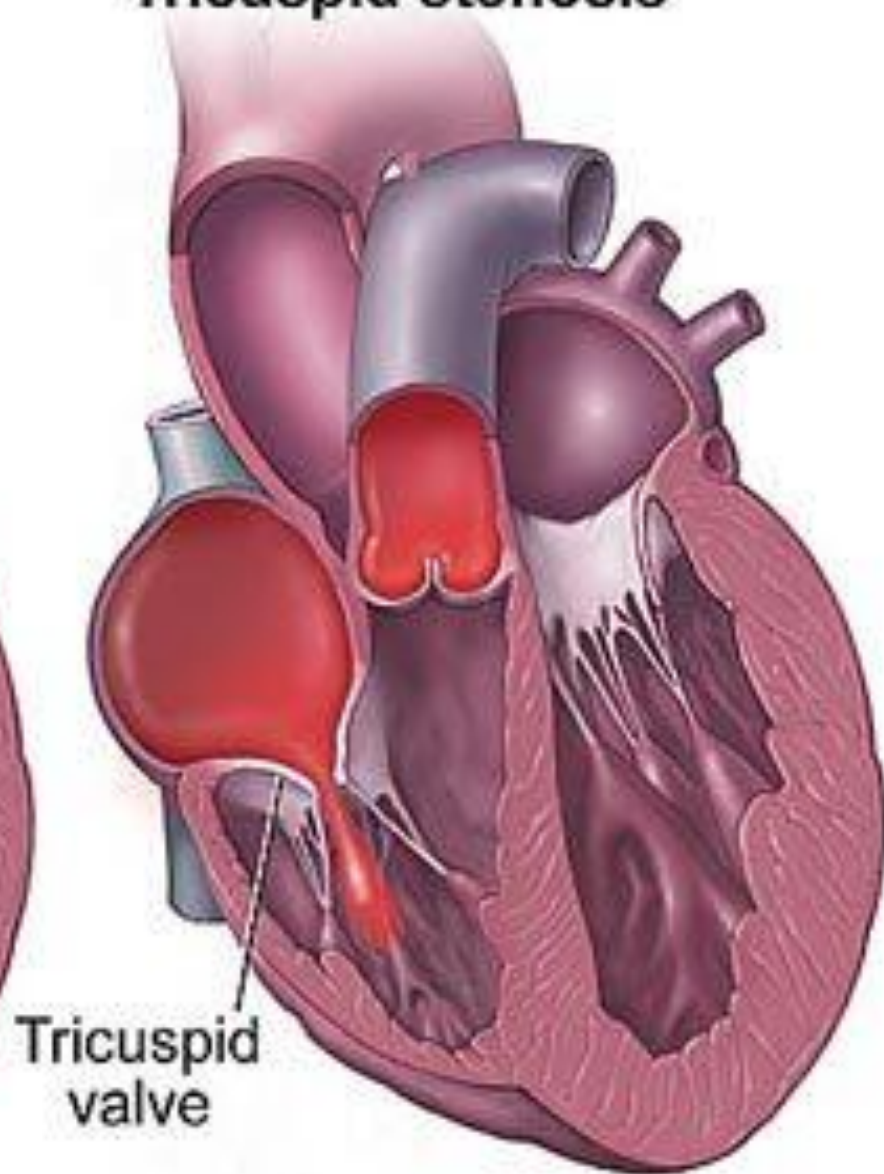


DIASTOLE

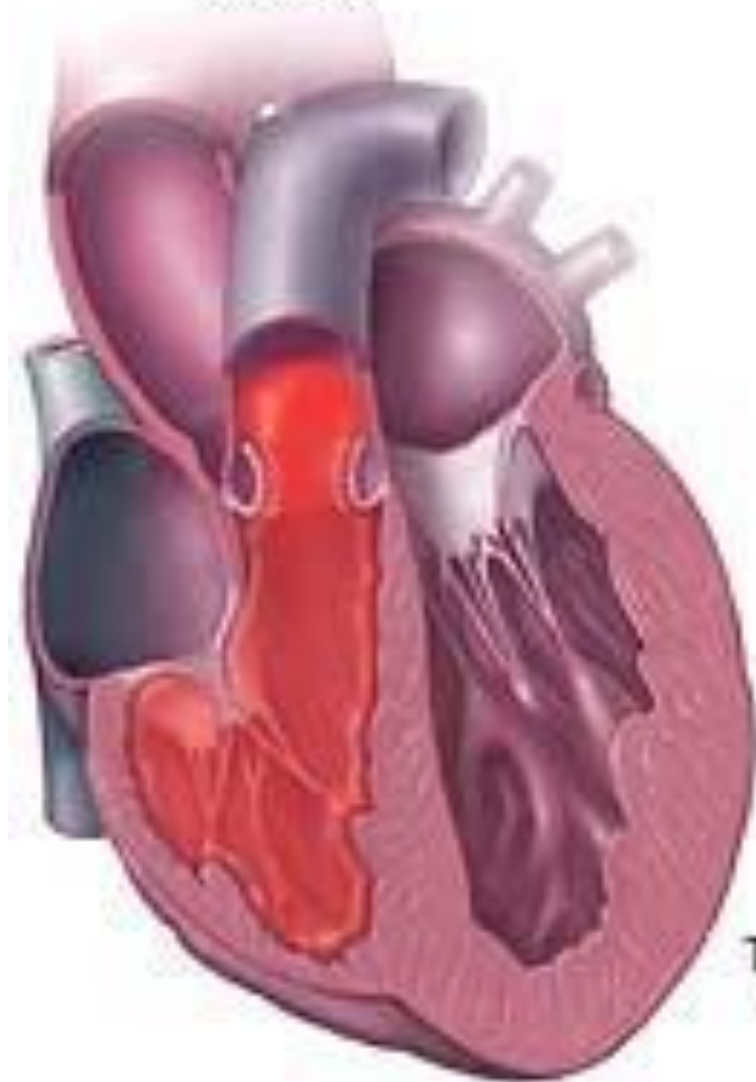
Normal



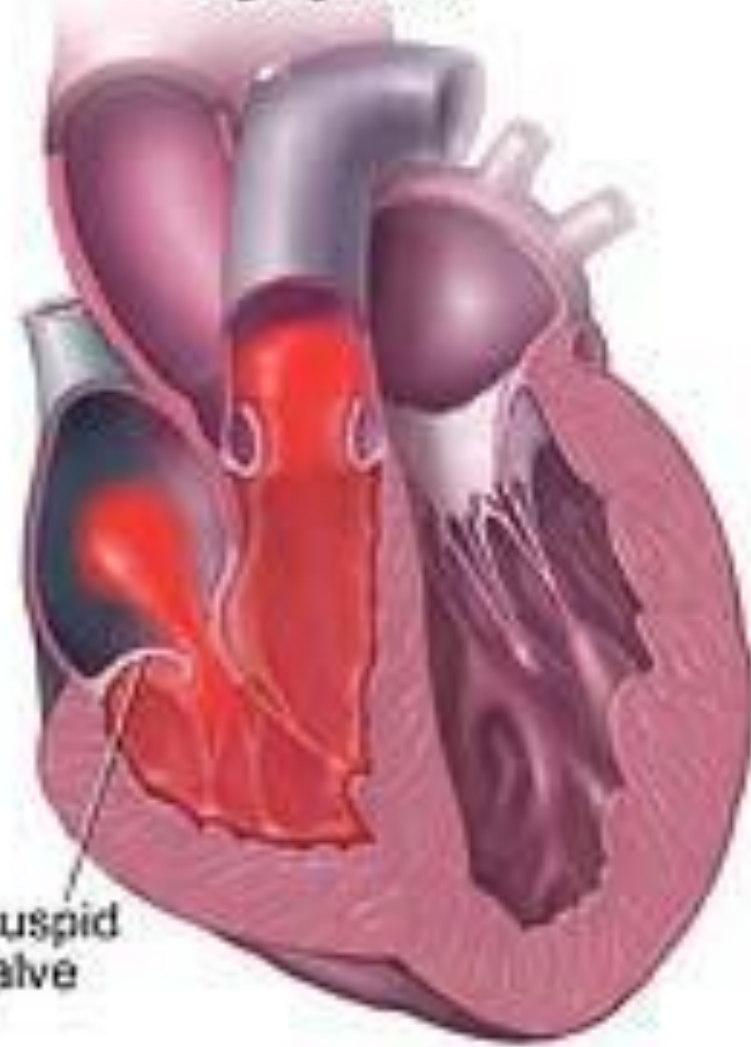
Tricuspid stenosis



Normal

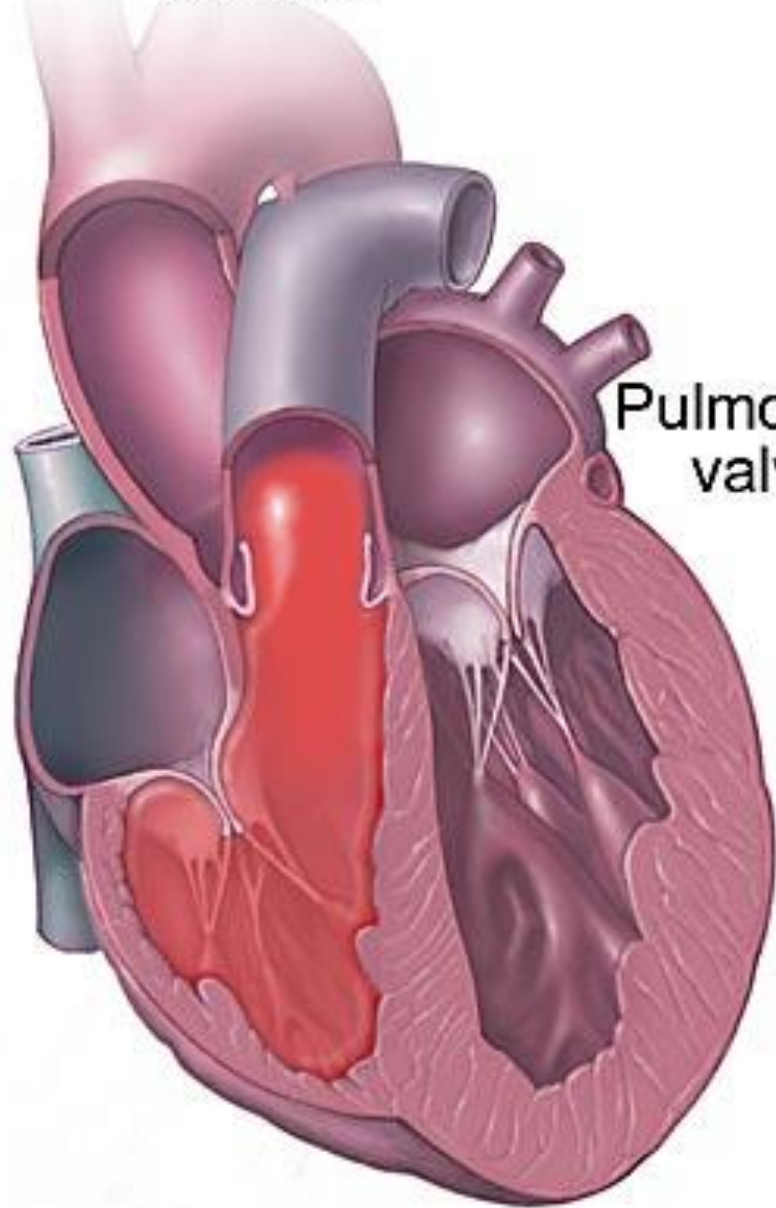


Tricuspid valve regurgitation



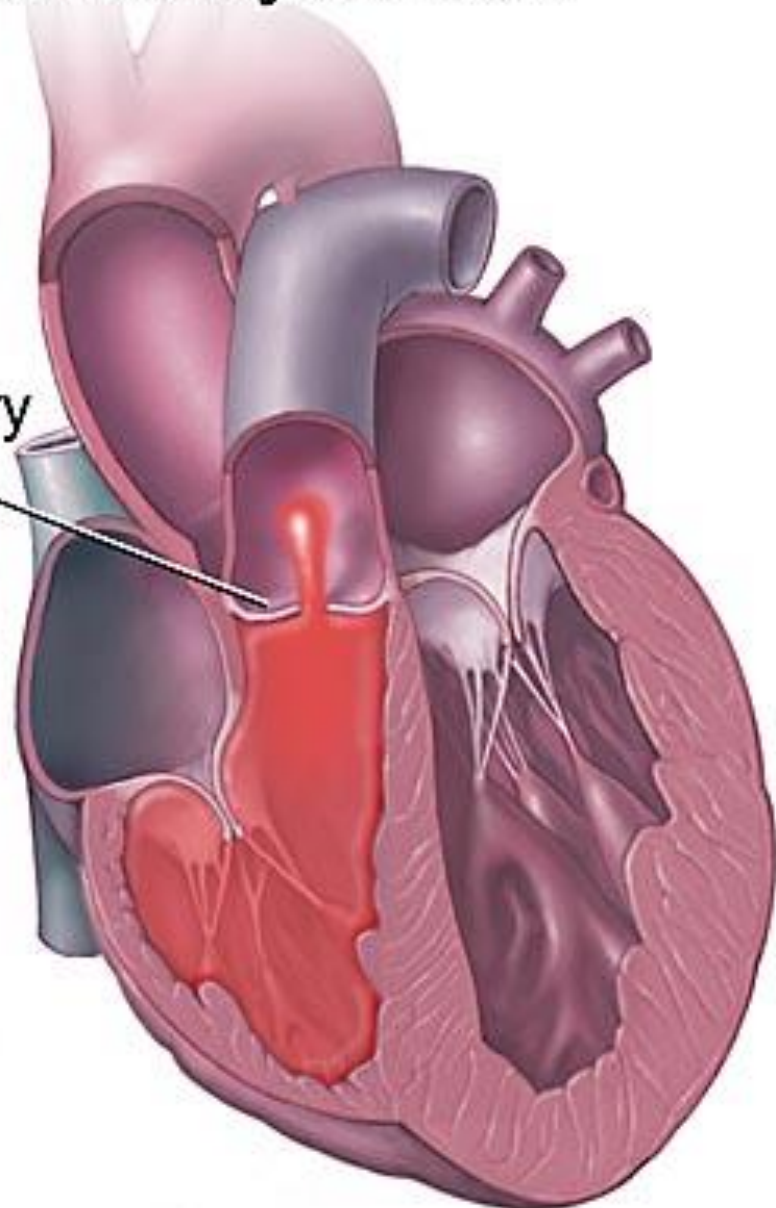
Tricuspid valve

Normal



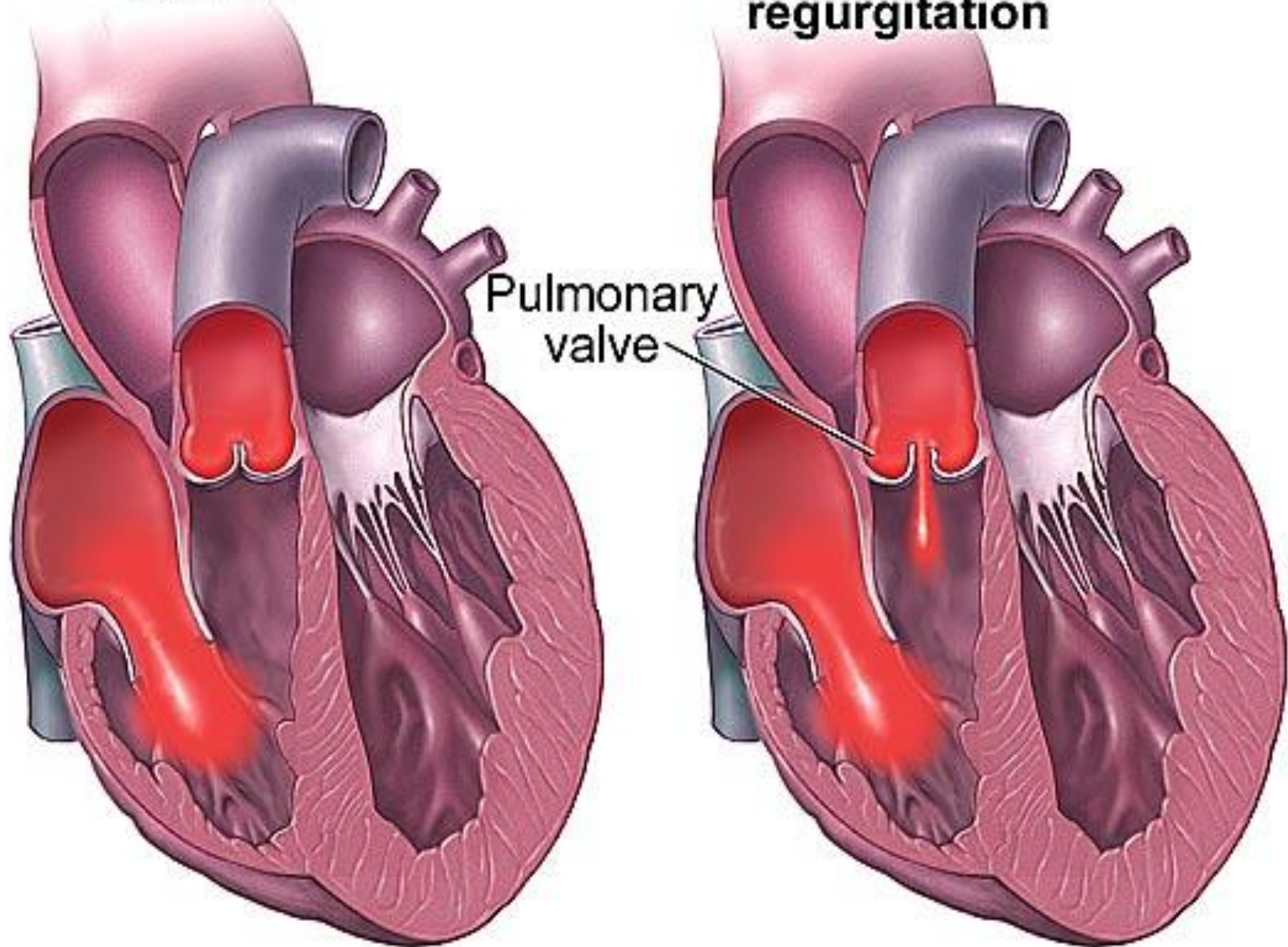
Pulmonary stenosis

Pulmonary
valve

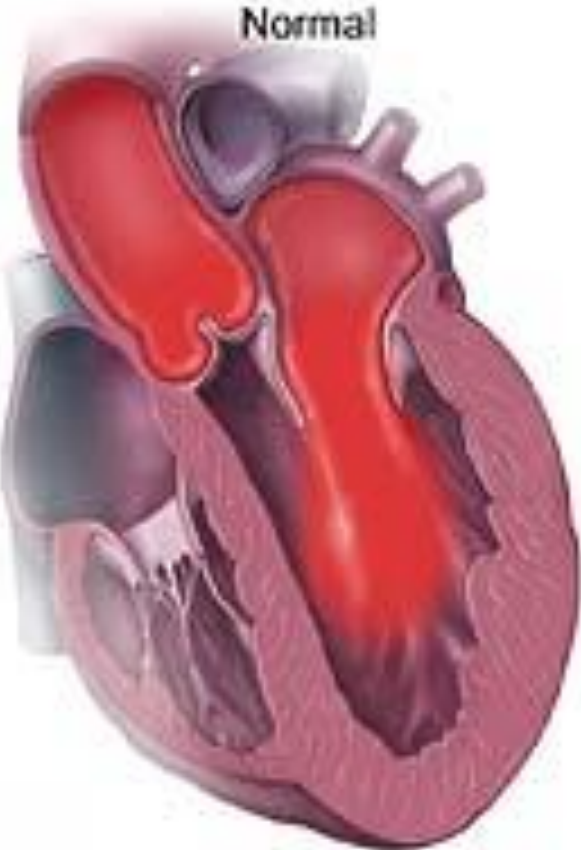


Normal

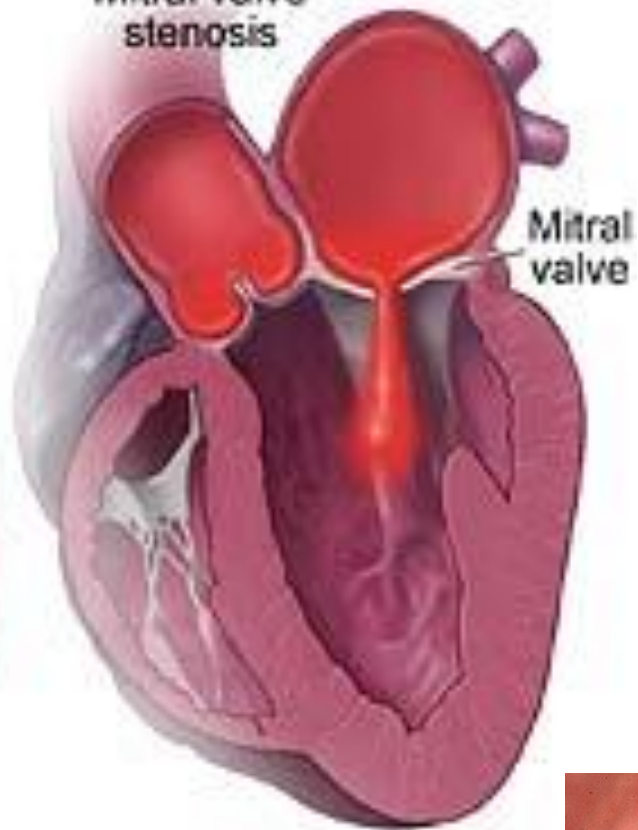
Pulmonary regurgitation

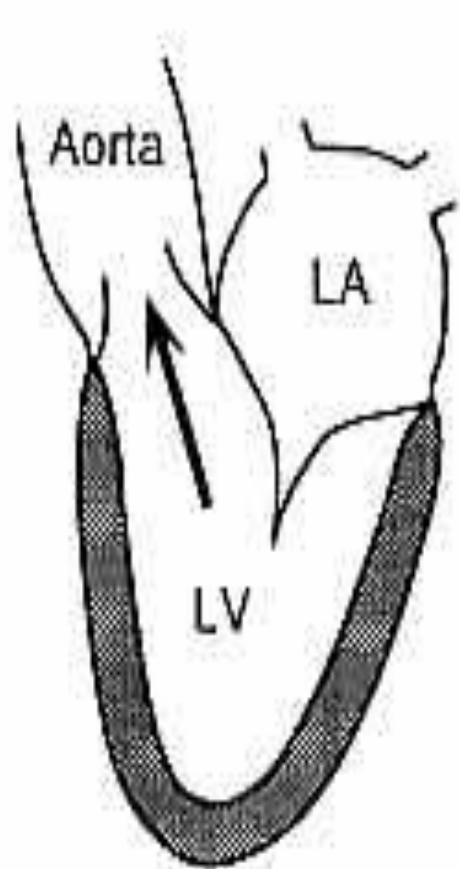


Normal



Mitral valve stenosis

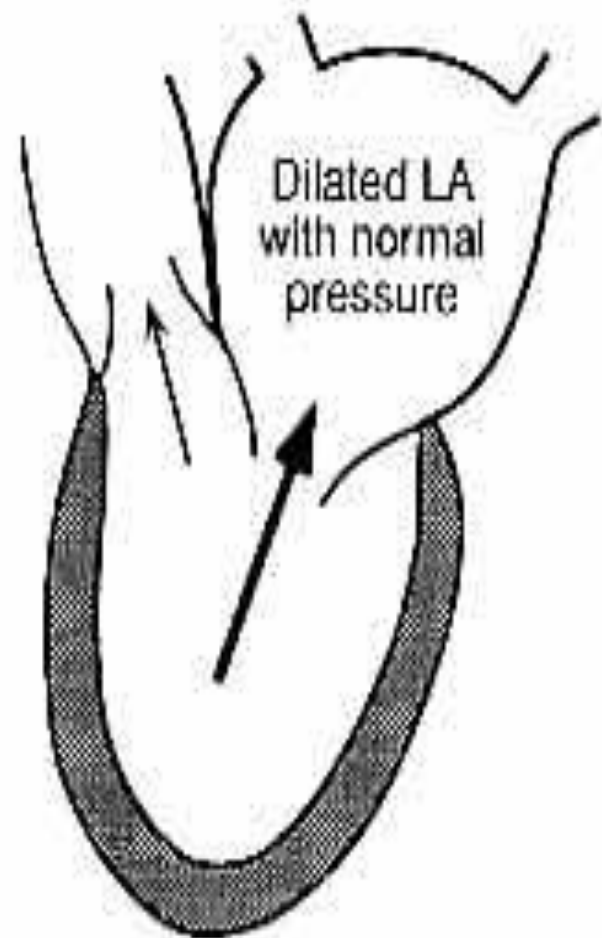




NORMAL
(SYSTOLE)



ACUTE
MITRAL
REGURGITATION



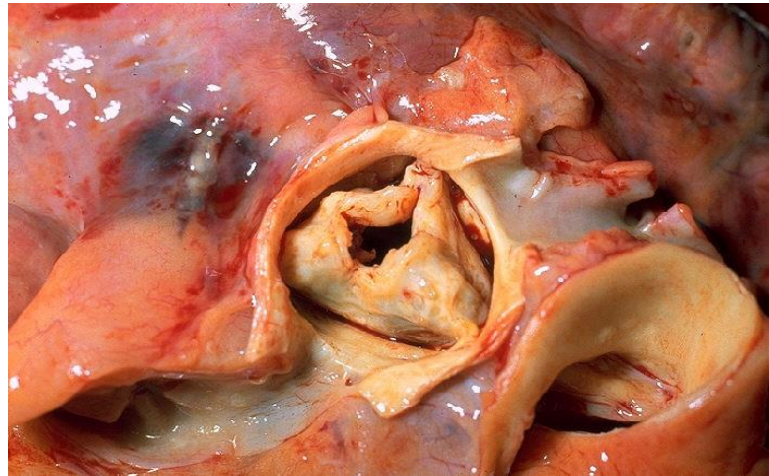
CHRONIC
MITRAL
REGURGITATION

Normal

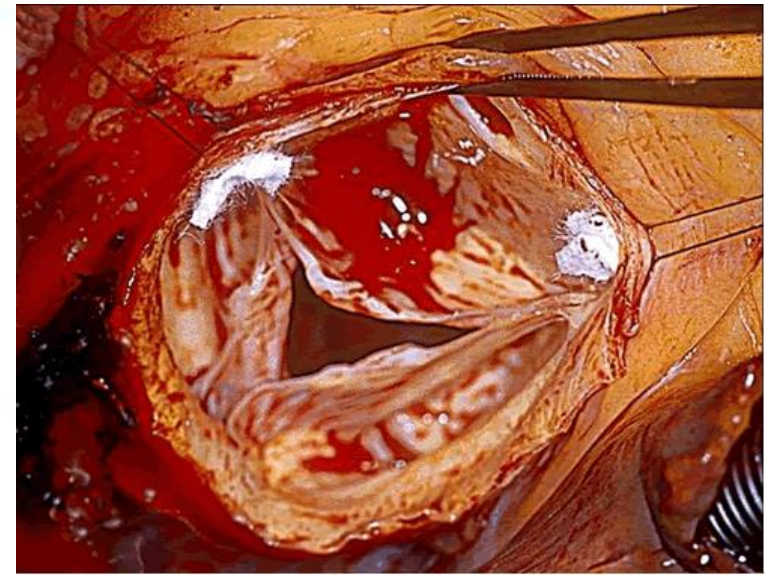
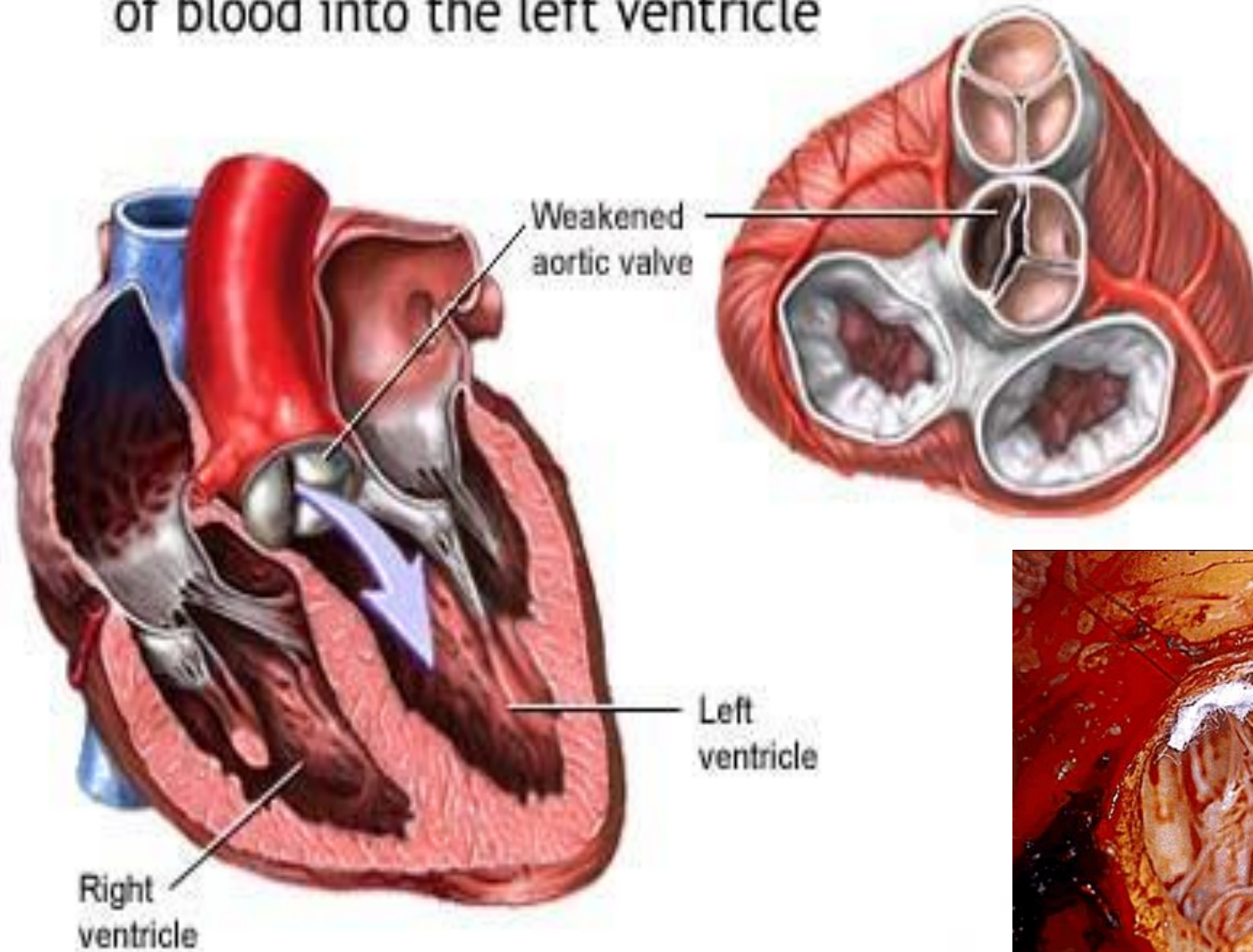


Aortic valve stenosis

Aortic valve



Failure of the aortic valve to close tightly causes back flow of blood into the left ventricle



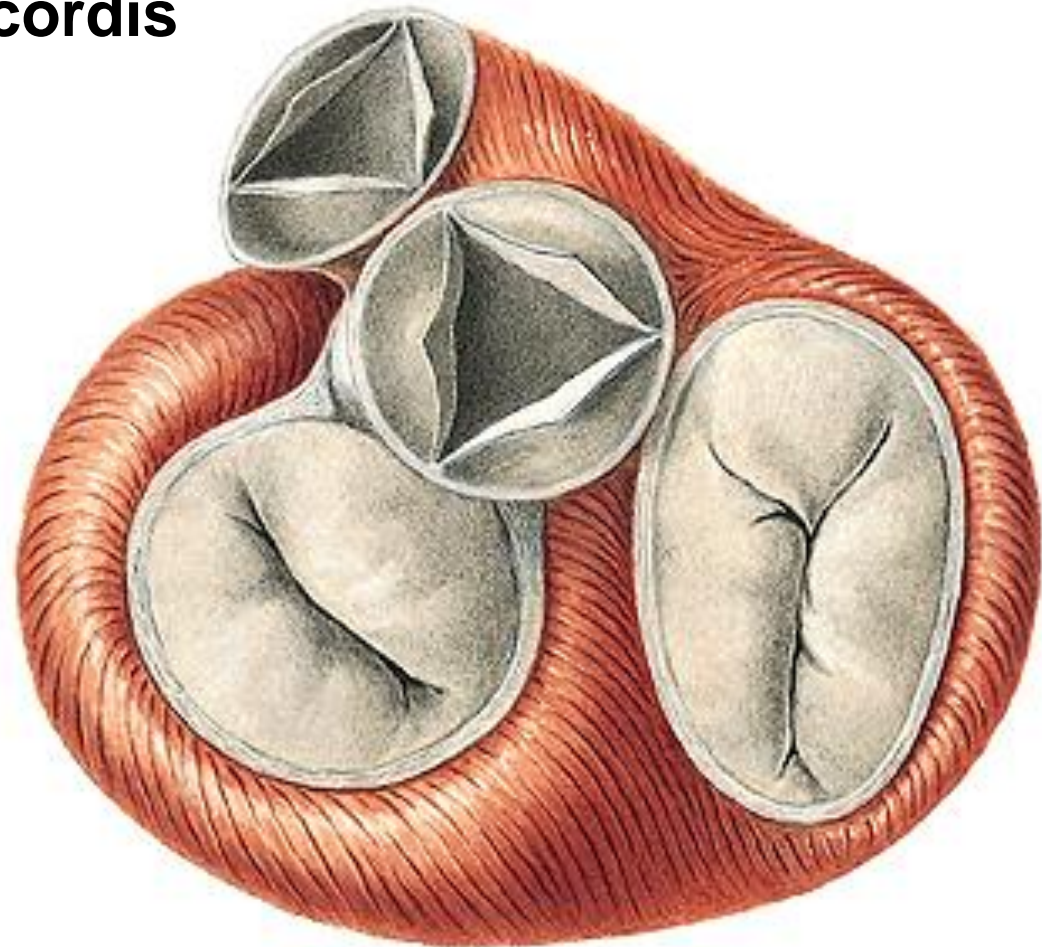
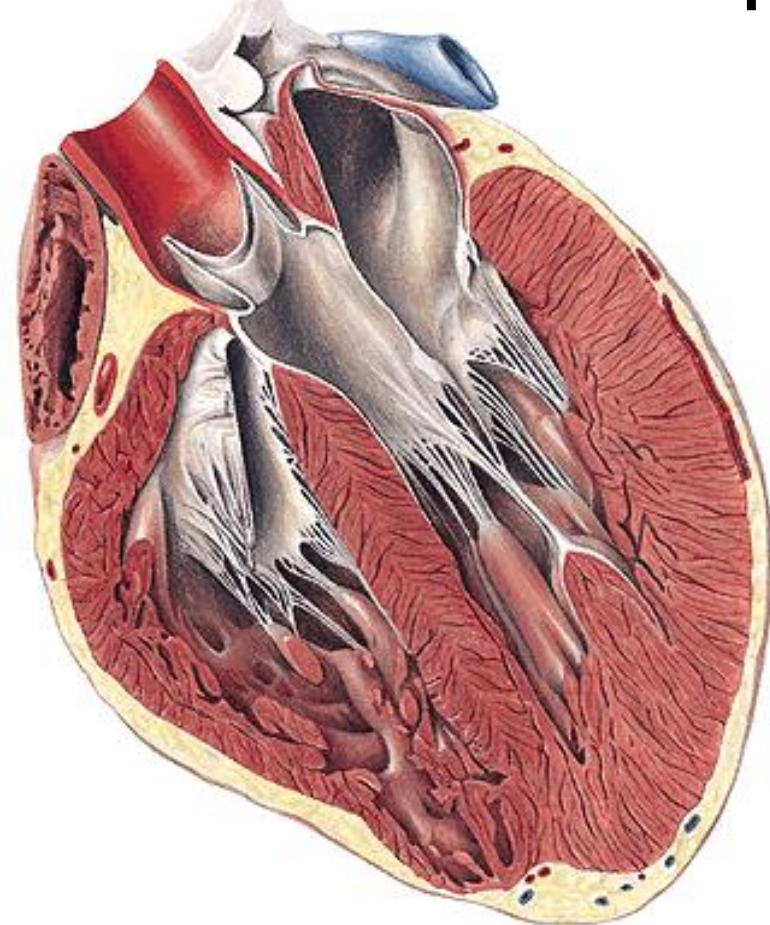
Endocardium, myocardium, pericardium

SKELETON OF THE HEART

Anulus fibrosus dexter, sinister, aorticus, trunci pulmonalis

Trigonum fibrosum dextrum et sinistrum

Pars membranacea septi cordis



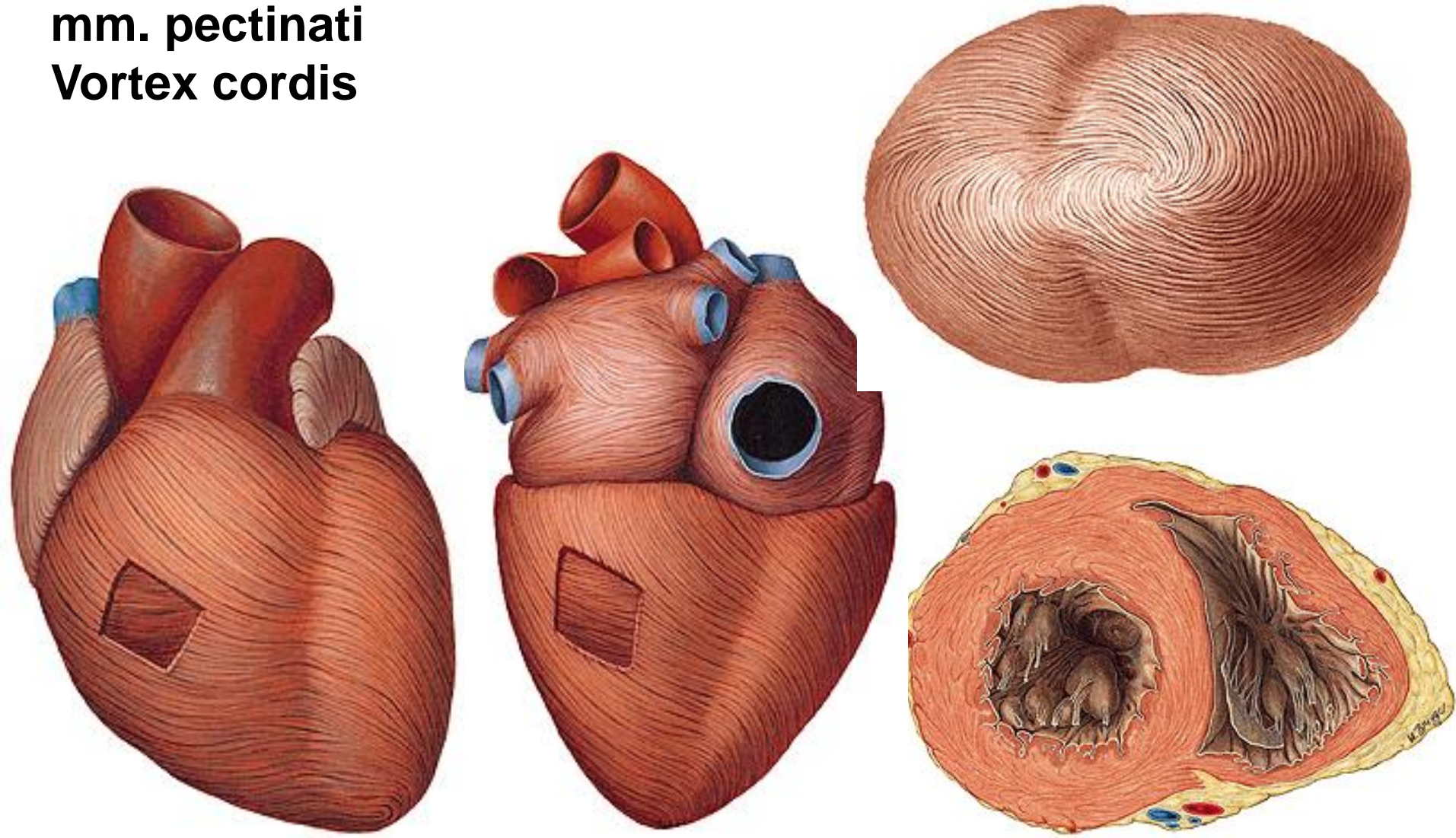
MYOCARDIUM

Fasciculus interauricularis horizontalis et verticalis

Fasciculus terminalis, intervenosus, limbicus sup. et inf.

mm. pectinati

Vortex cordis



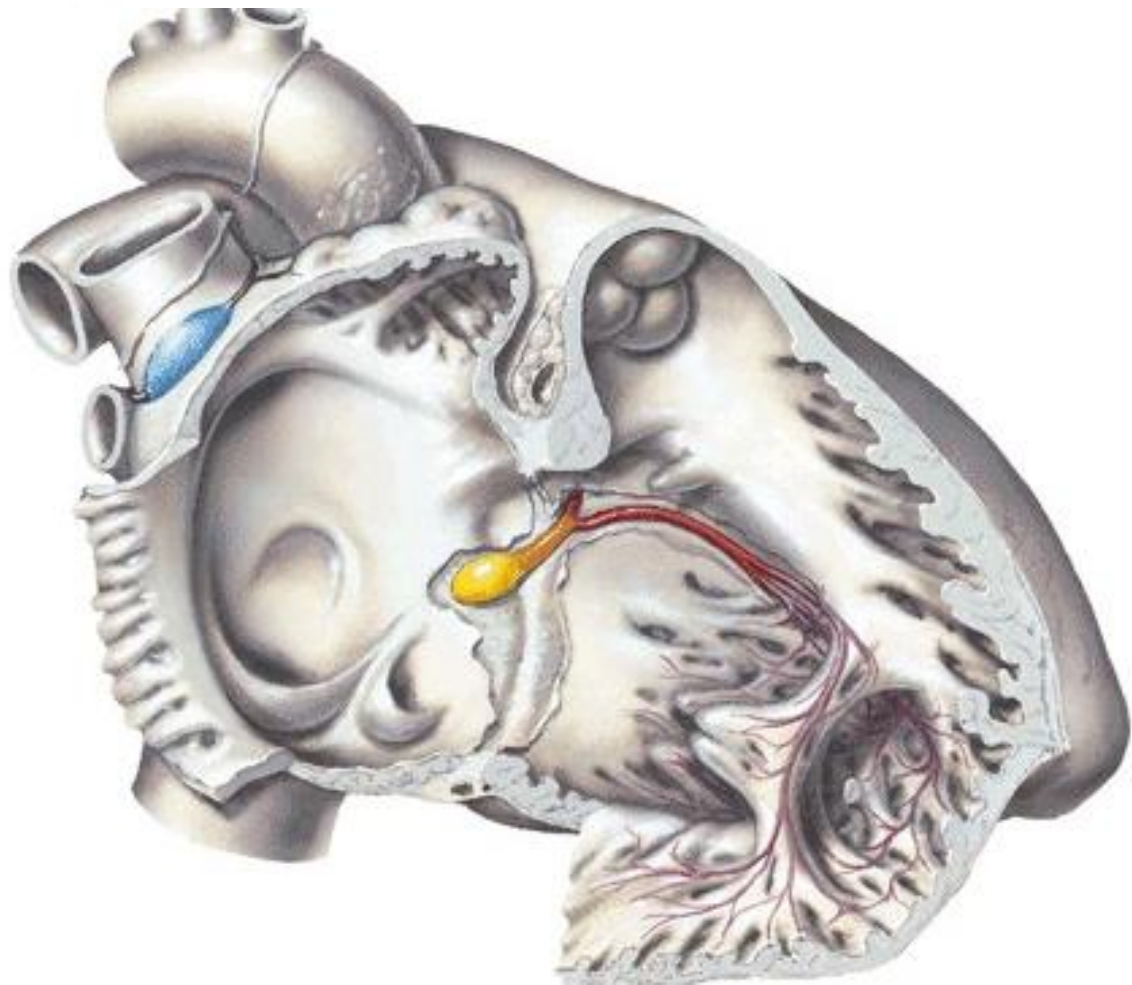
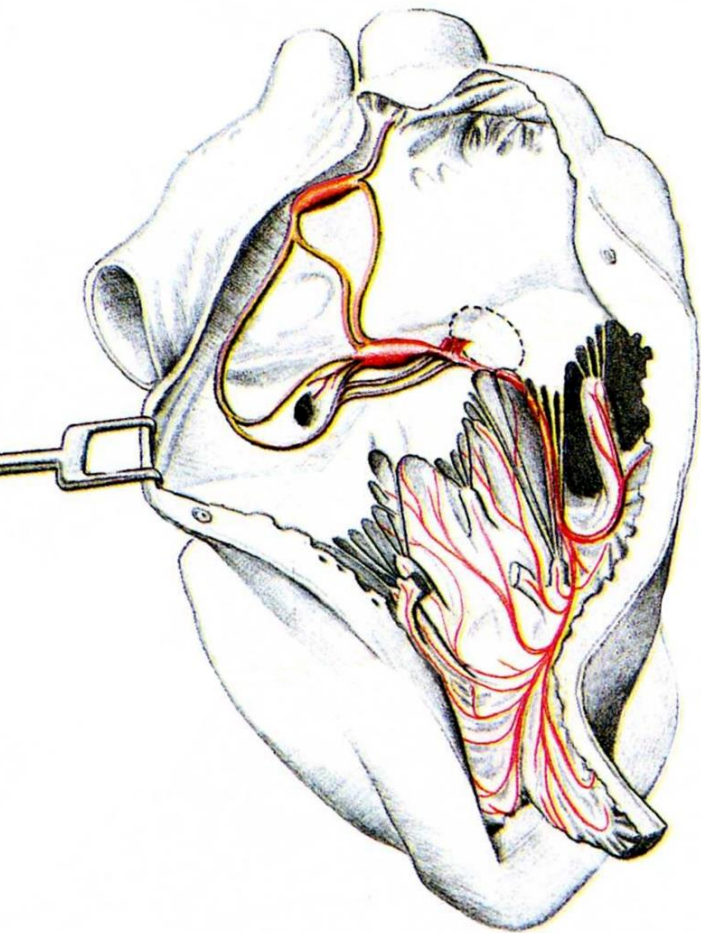
CONDUCTING SYSTEM

Nodus sinuatrialis

Nodus atrioventricularis

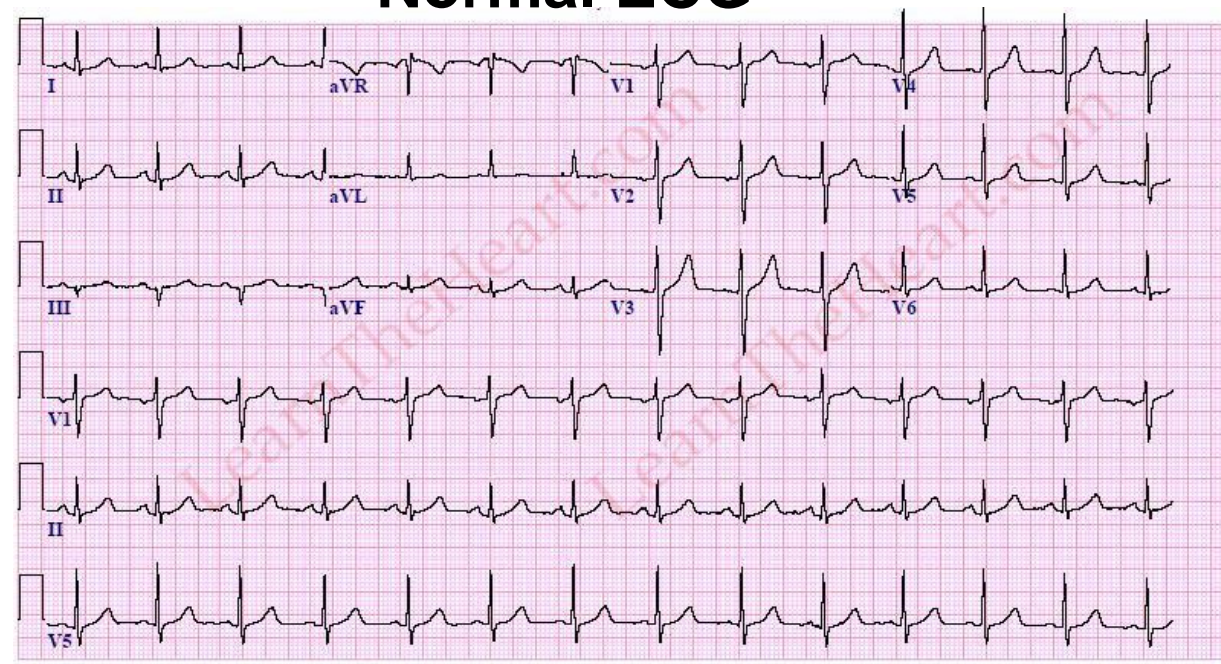
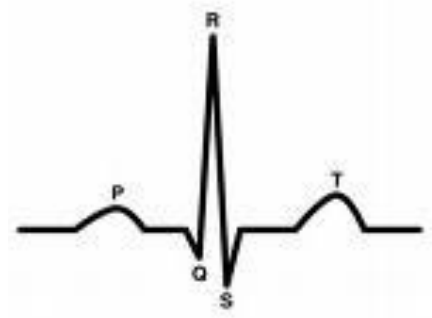
Fasciculus atrioventricularis (His) – crus dextrum et sinistrum

Rami subendocardiales - Purkinje fibers



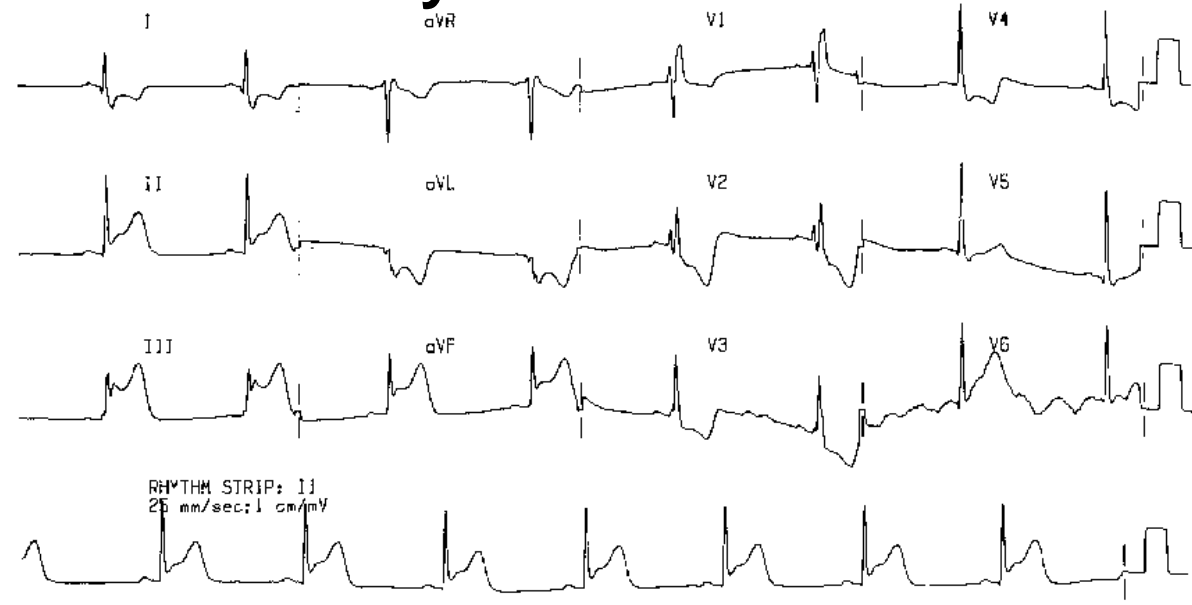
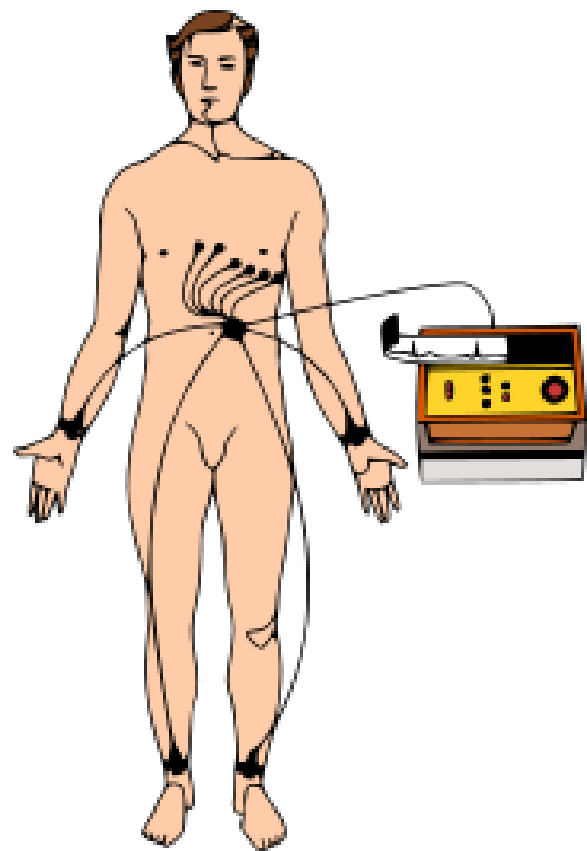
ECG

Normal ECG



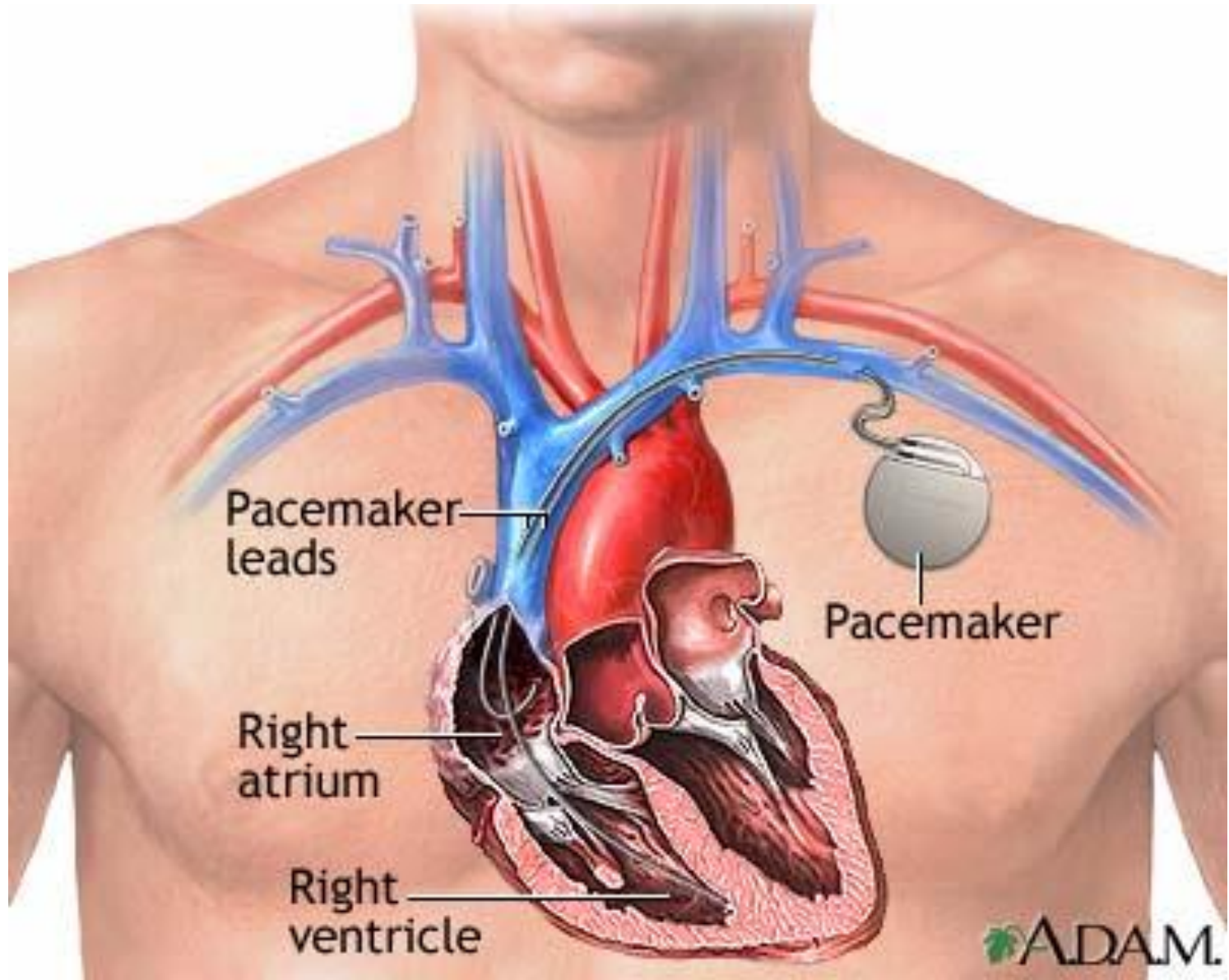
25mm/s 10mm/mV 40Hz 005C 12SL 254 CID: 26 EID: Unconfirmed EDT: ORDER:

Myocardial infarction



RHYTHM STRIP: 11
25 mm/sec; 1 cm/mV

Artificial pacemaker



PERICARDIUM FIBROSUM

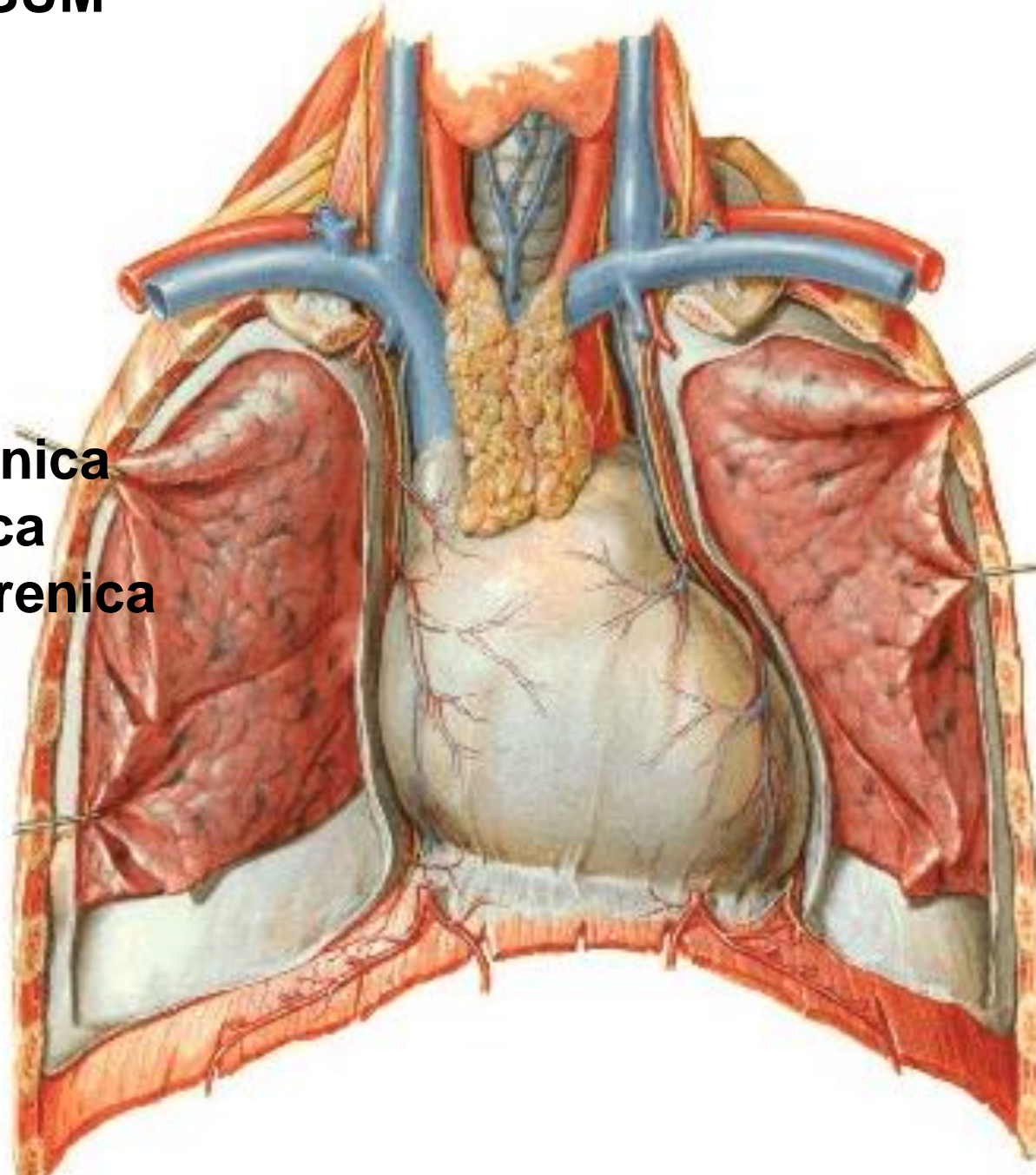
- basis
- cupula
- pars sternalis,
- partes laterales
- pars dorsalis

Ligg. pericardiacophrenica

Ligg. sternopericardiaca

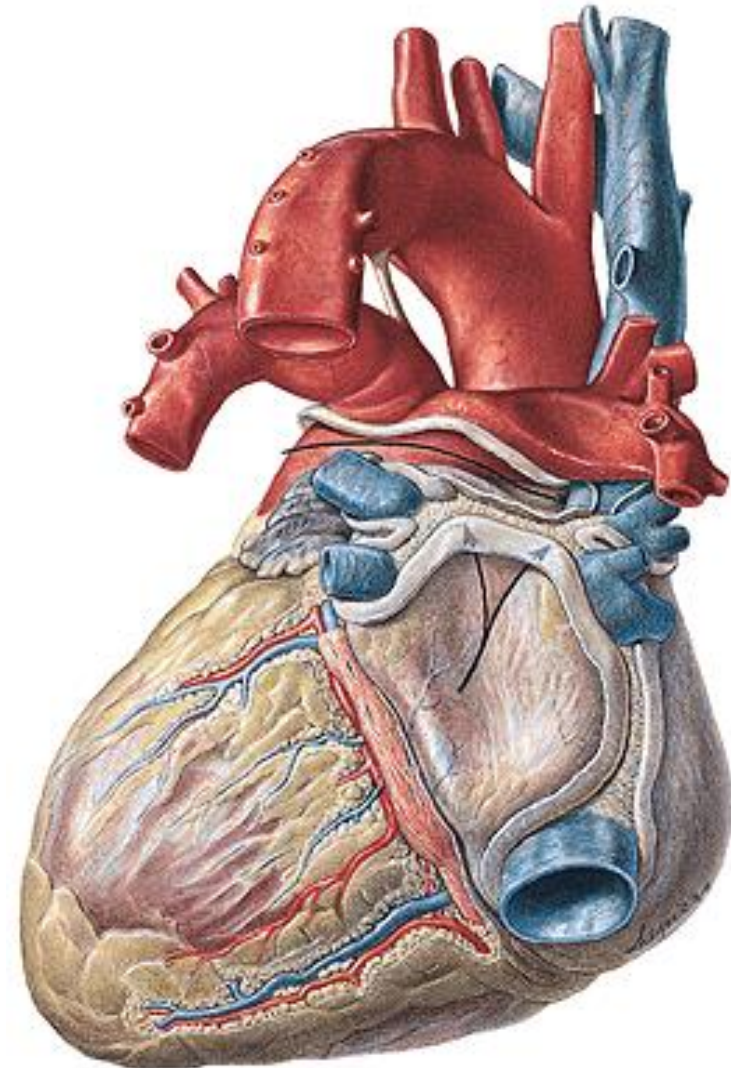
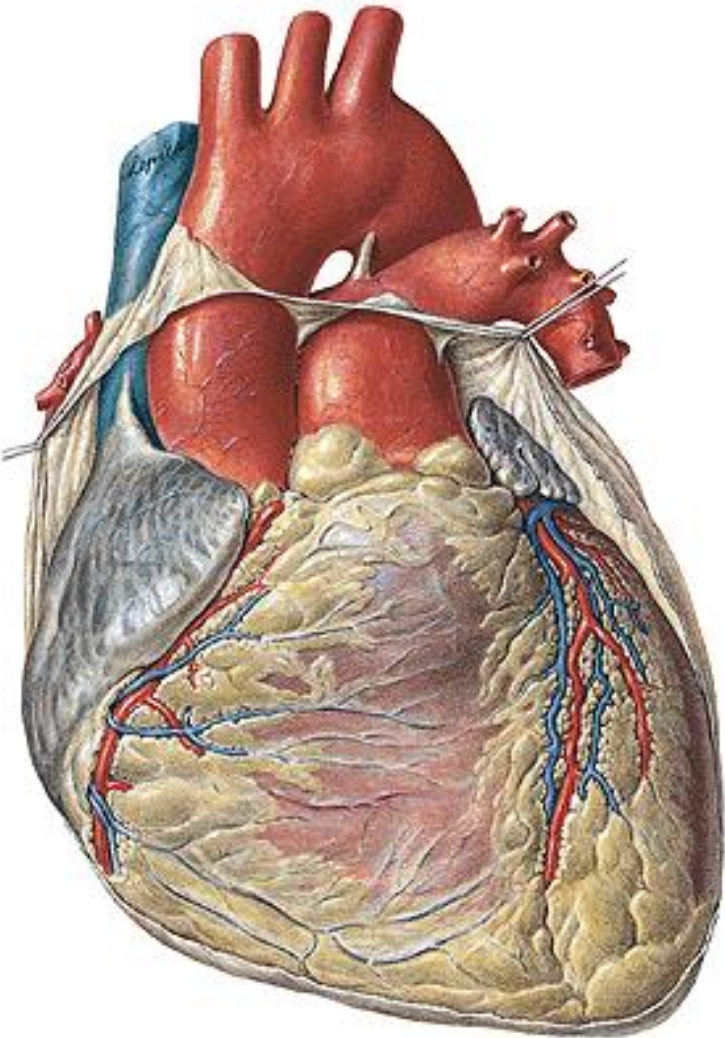
A. et v. pericardiacophrenica

N. phrenicus

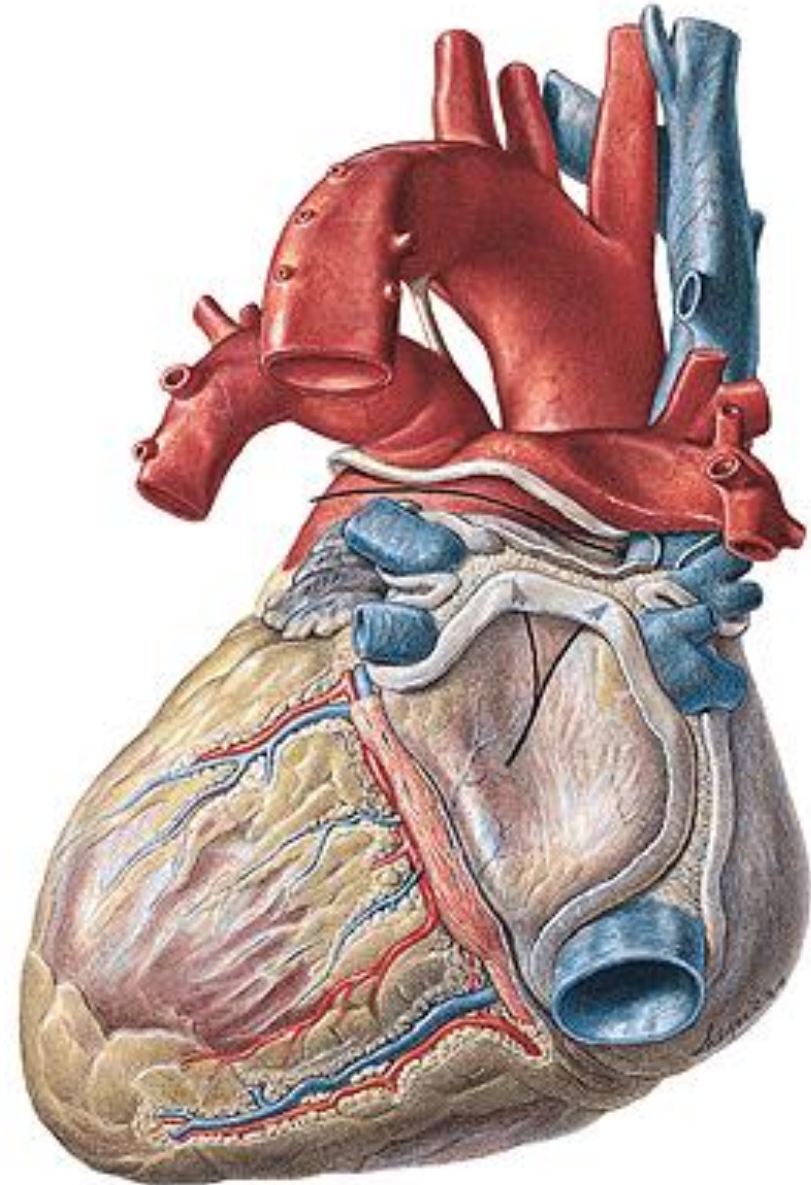
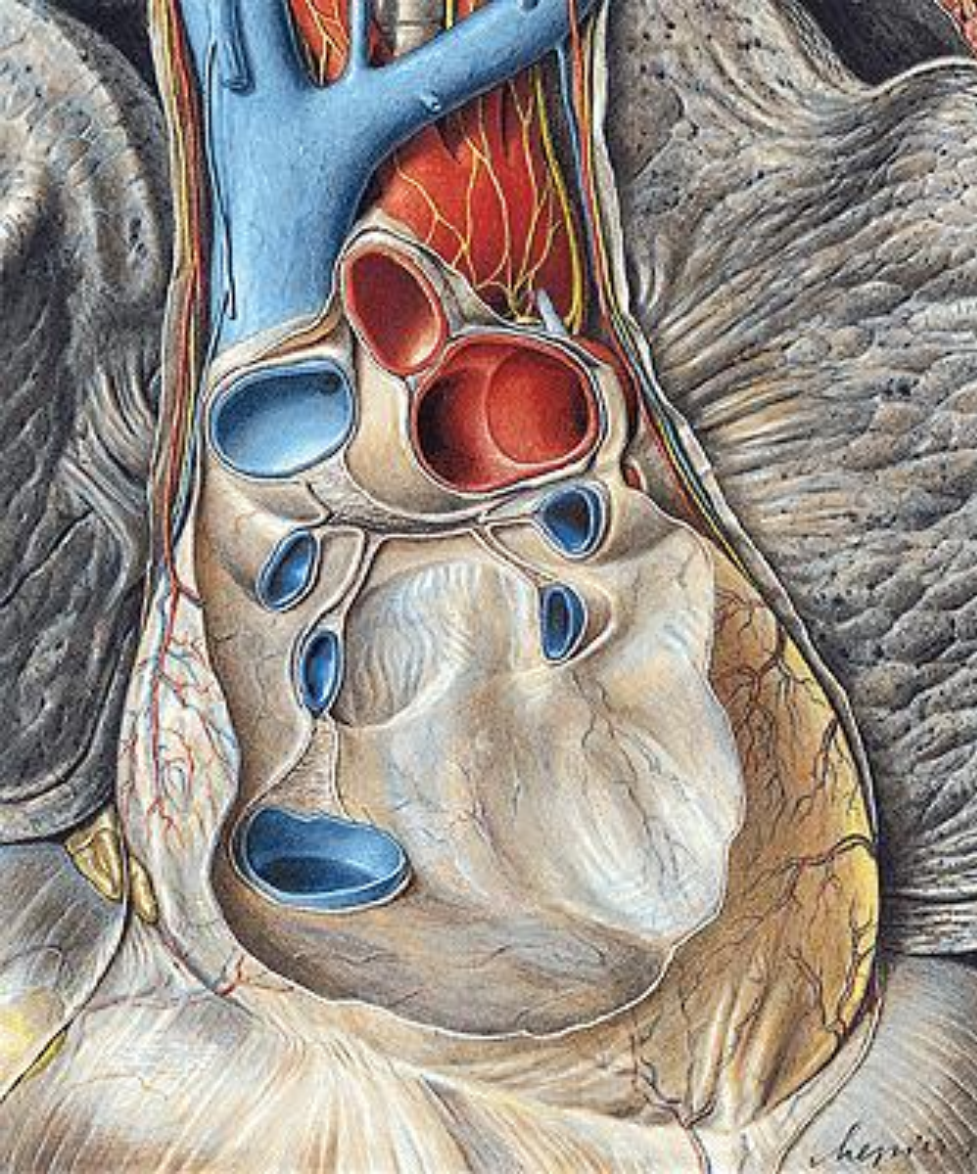


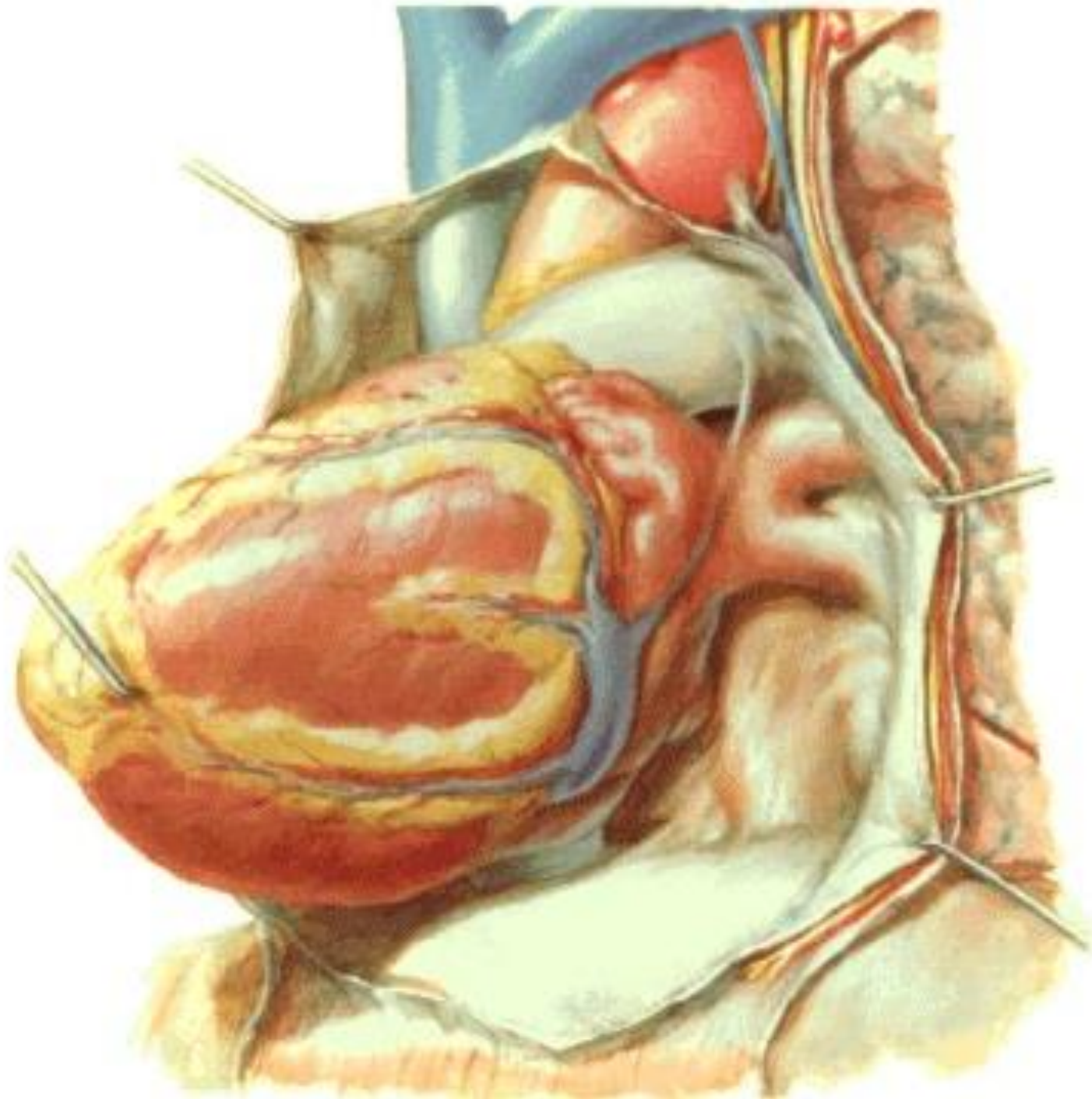
PERICARDIUM SEROSUM

- lamina parietalis
- lamina visceralis (epicardium)
- cavum pericardii – liquor pericardii



Vagina serosa arteriarum – sinus transversus pericardii
Porta venarum – sinus obliquus pericardii





A. coronaria cordis dx. - rr. atriales dx.

- rr. ventriculares dx.

- r. marginalis dx.

- r. coni arteriosi

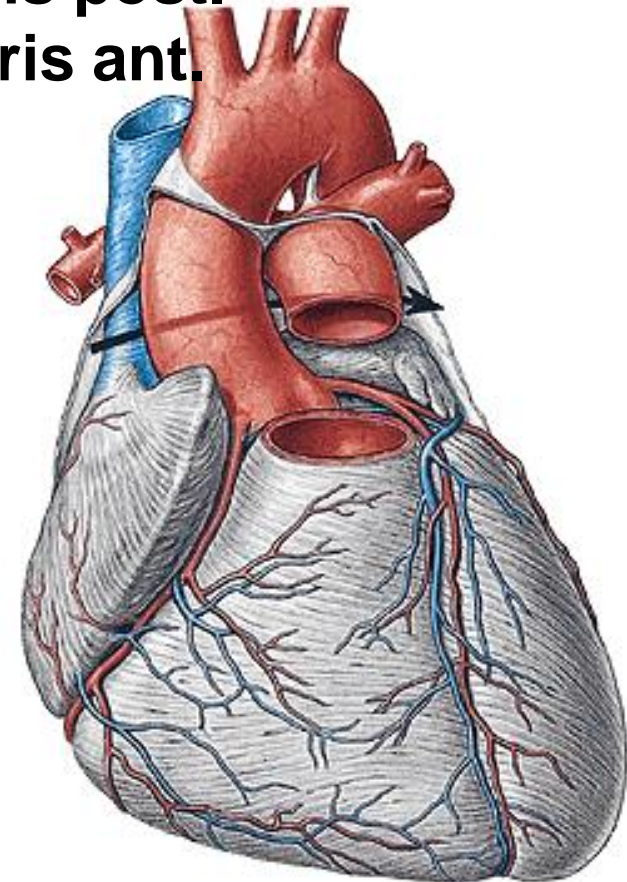
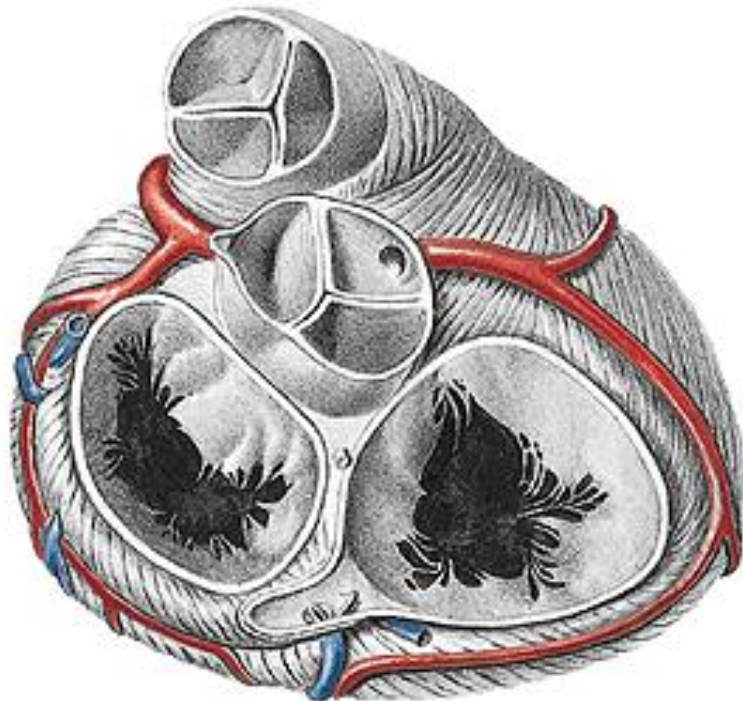
- r. nodi sinuatrialis

- r. nodi atrioventricularis

- r. interventricularis post.

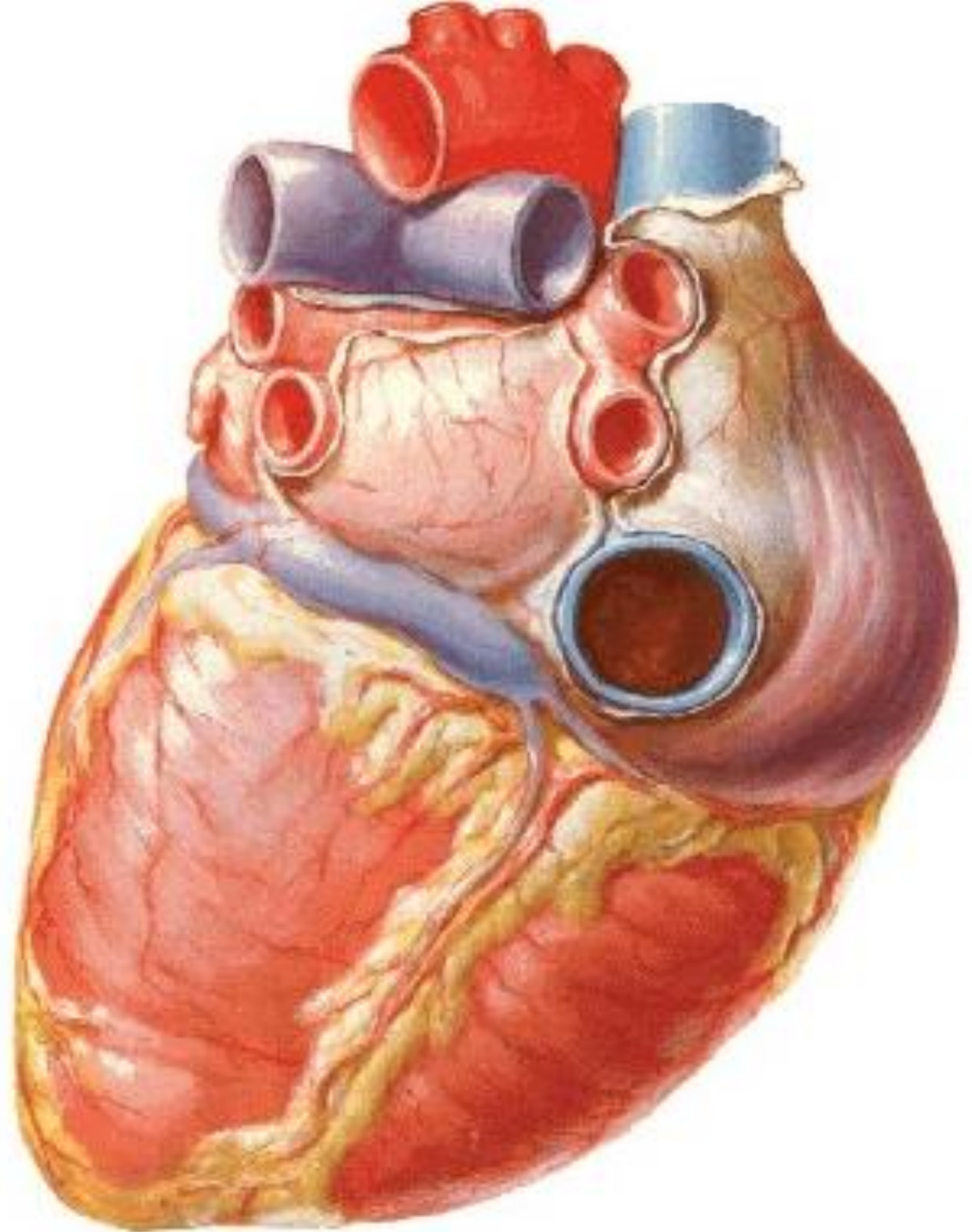
A. coronaria cordis sin. - r. interventricularis ant.

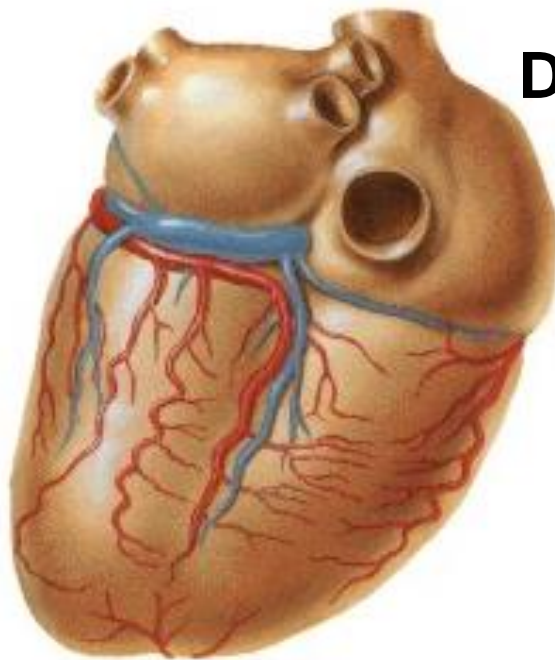
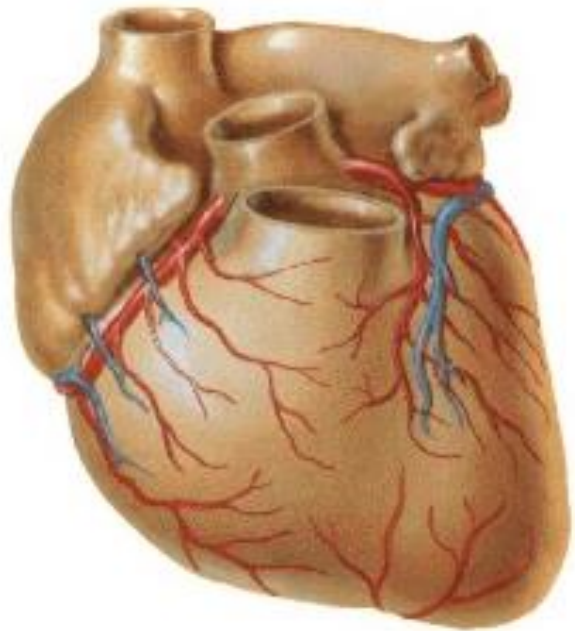
- r. circumflexus



Dominance of RCA

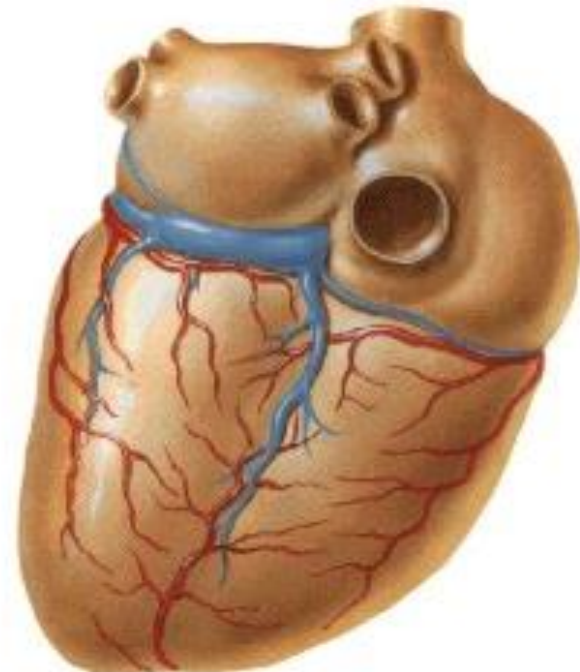
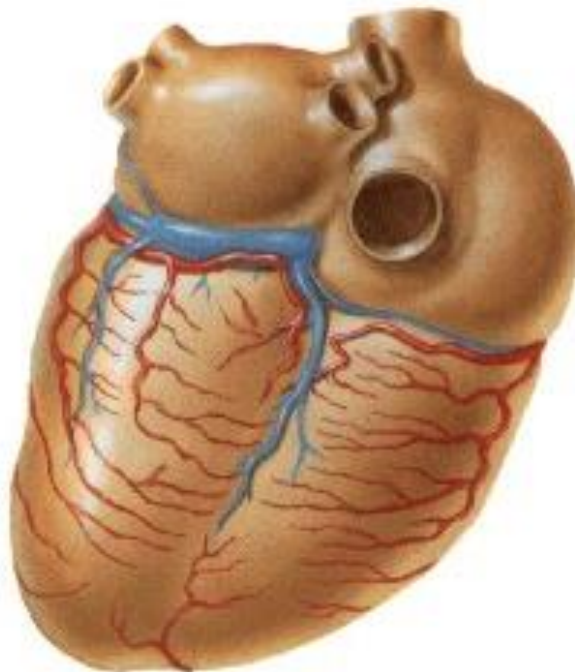
67%





**Dominance of LCA
15%**

**Codominance
18%**



Venae cordis

1. Sinus coronarius cordis

a) v. cordis magna

b) v. cordis media

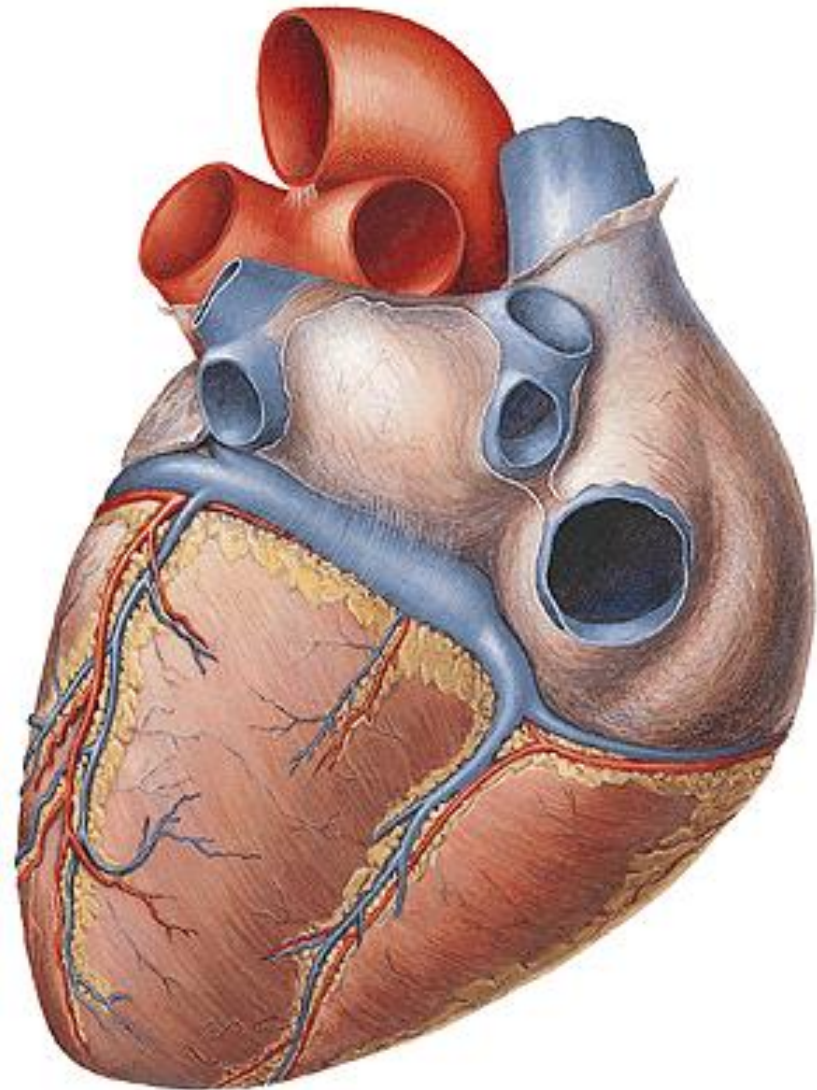
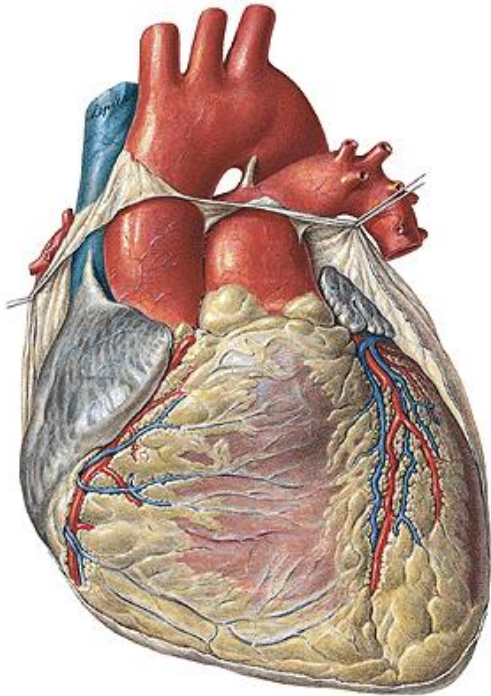
c) v. cordis parva

d) v. obliqua atrii sinistri

e) v. posterior ventriculi sinistri

2. Vv. cordis anteriores

3. Vv. cordis minimae



Lymphatics:

**Truncus lymphaticus
anterior sinister –
truncus lymph. post. –
nodus lymph. retroaorticus
Truncus lymph. ant. dx. –
nodus lymph. praeaorticus**

Nerves:

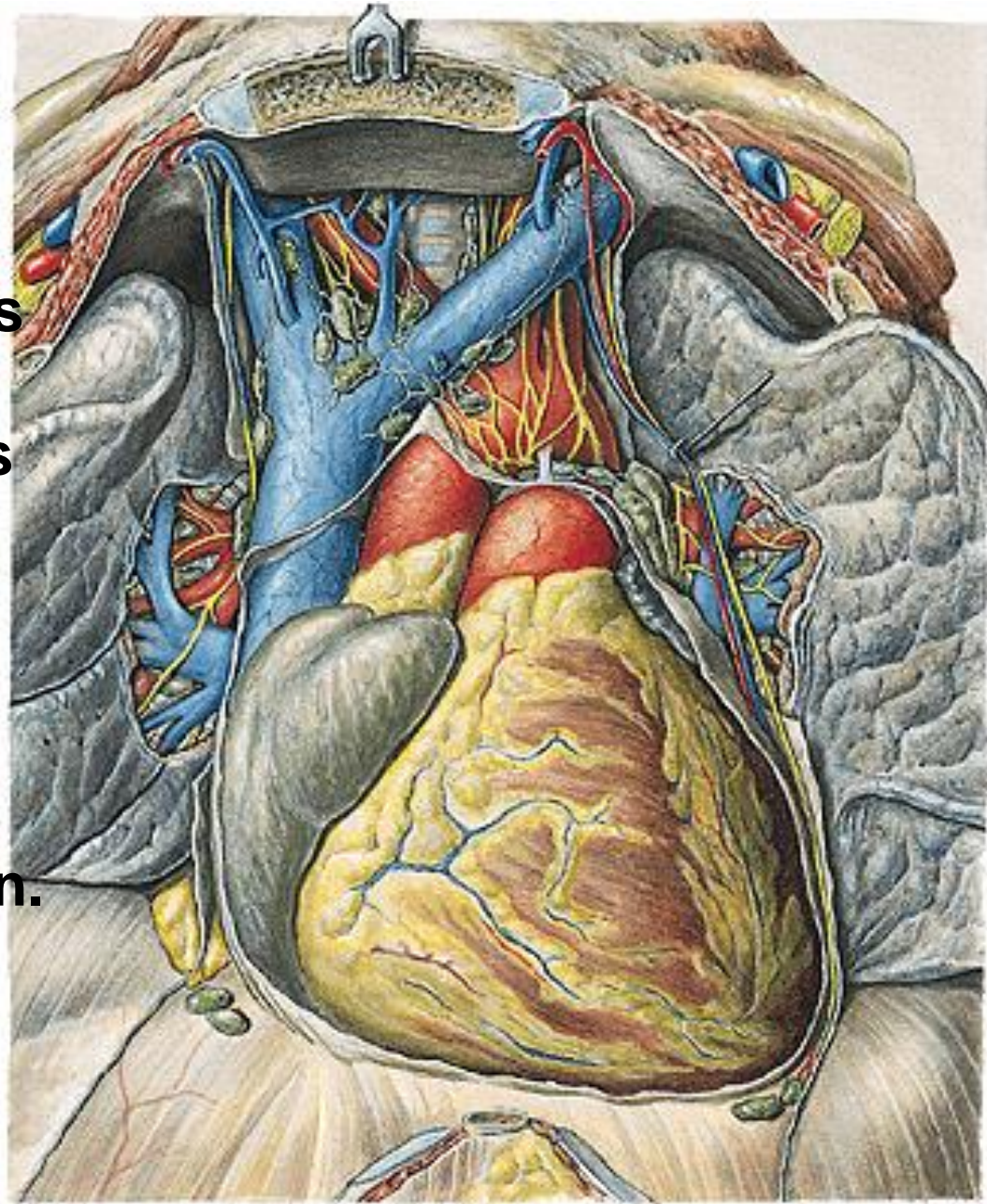
**Plexus cardiacus spf.
(ganglion cardiacum)
Plexus cardiacus prof.
Plexus coronarius dx. et sin.**

Nn. cardiaci (symp.)

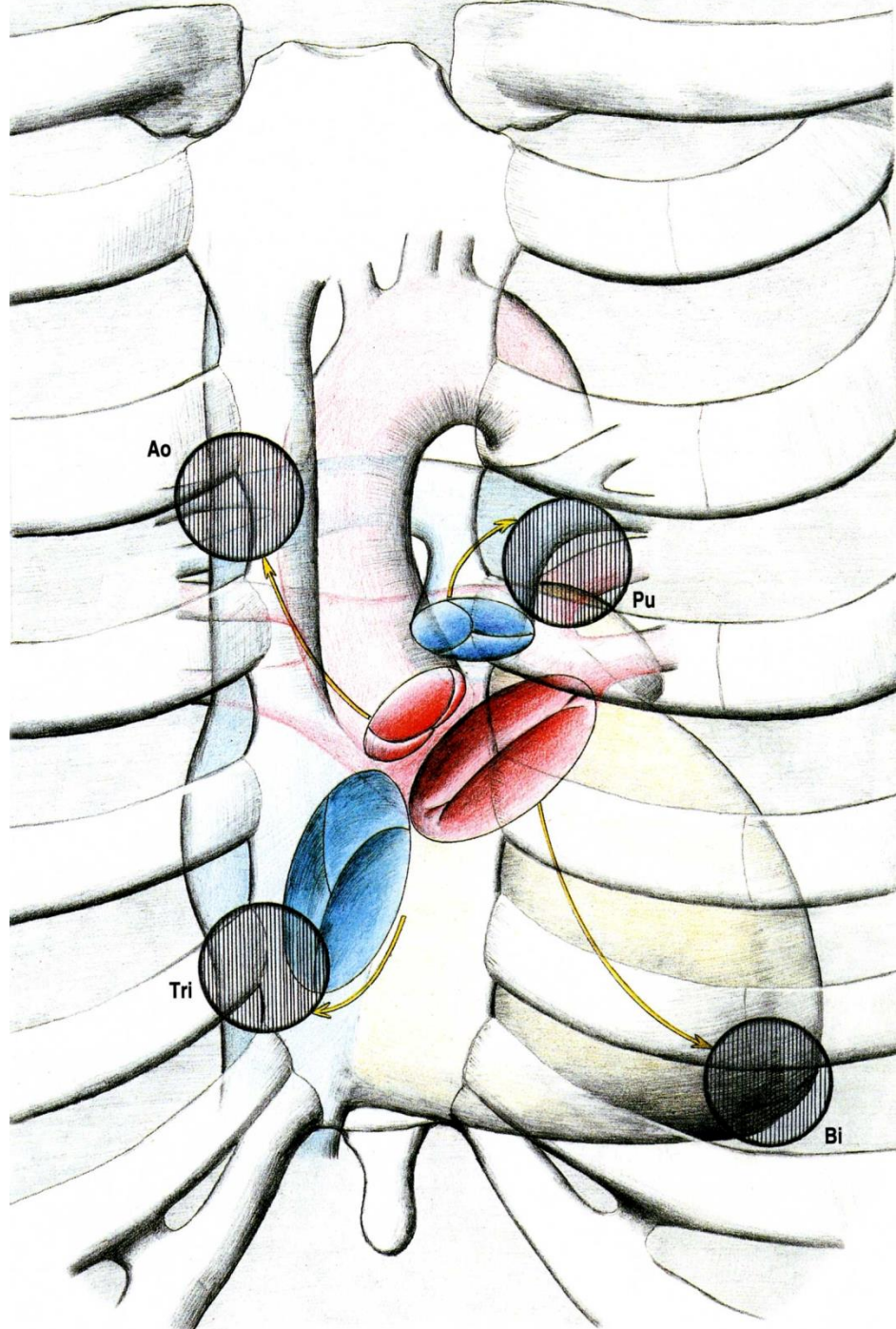
– accelerantes

Rr. cardiaci (parasymp.)

– retardantes



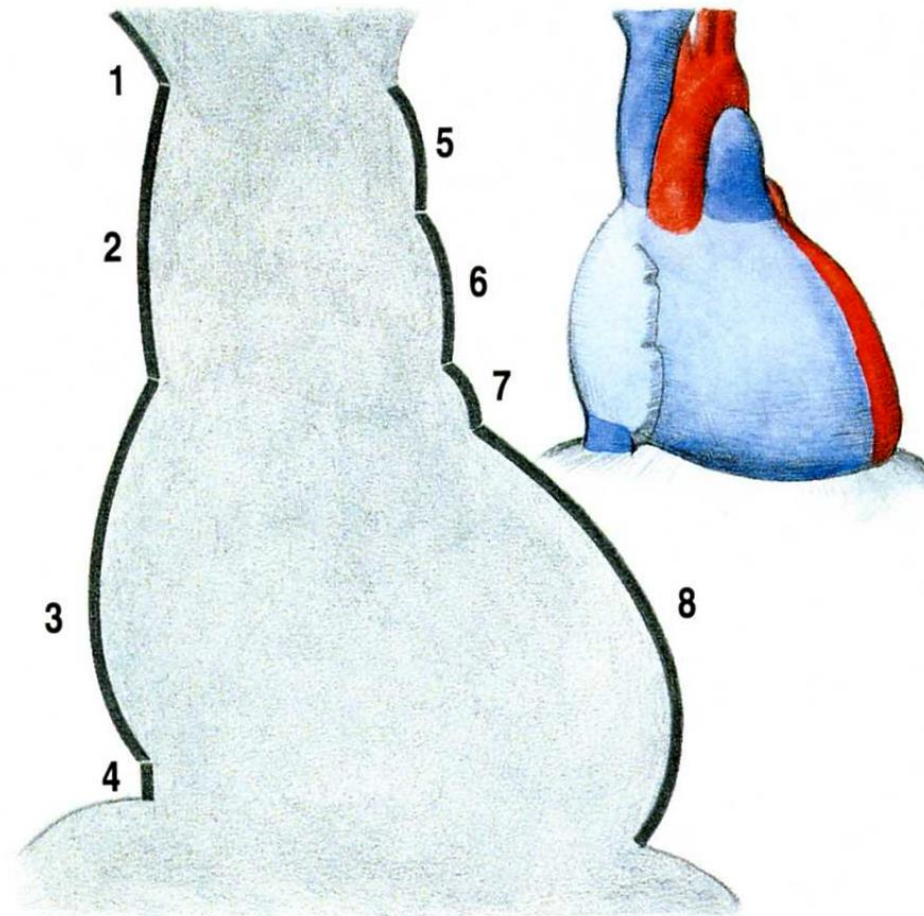
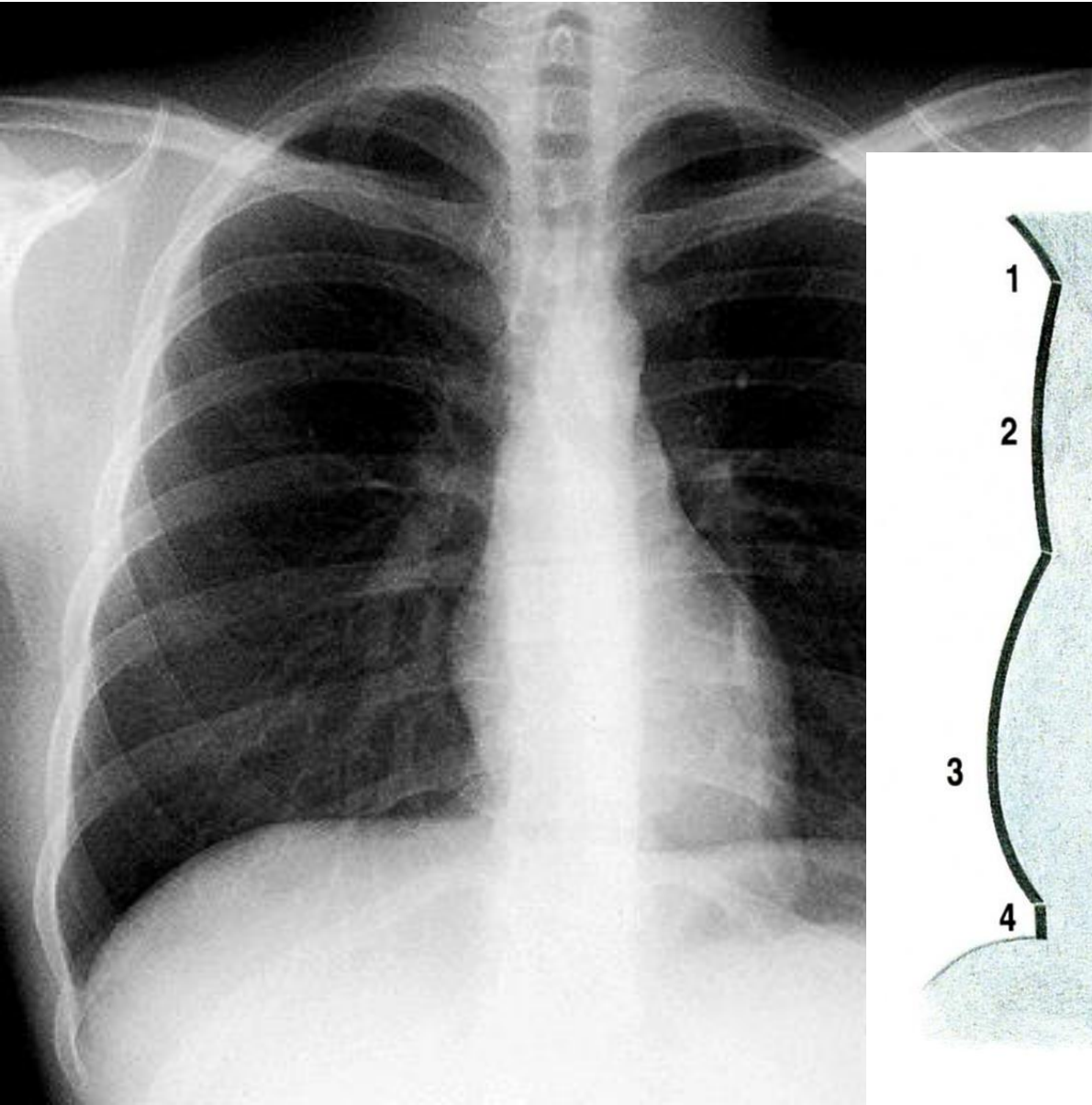
Sites of auscultation:

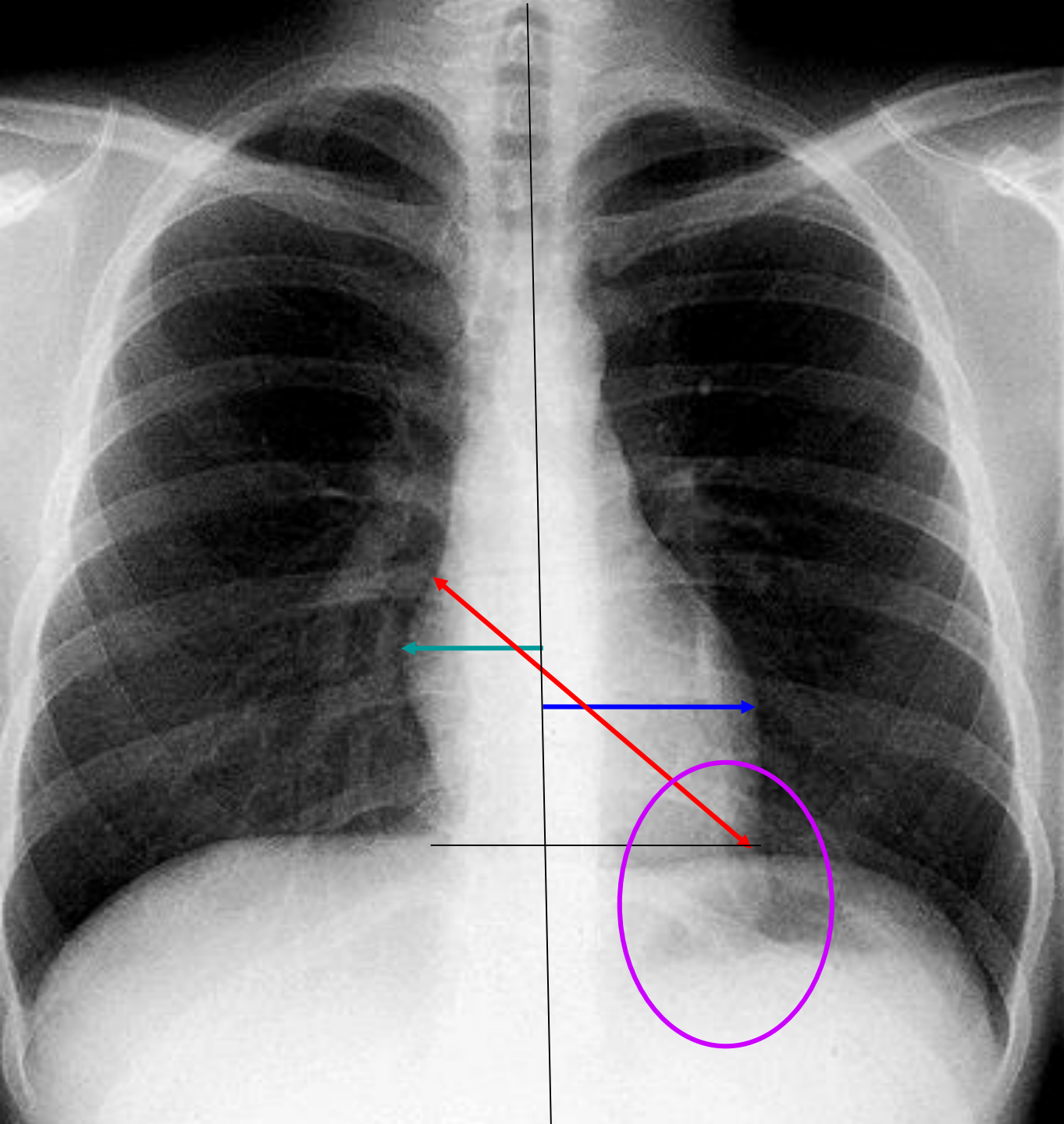


Heart shadow:

1. V. brachiocephalica dx.
2. V. cava sup.
3. Atrium dx.
4. V. cava inf.

5. Arcus aortae
6. Truncus pulmonalis
7. Auricula sin.
8. Ventriculus sin.





**Distantia
mediodextra**

**Distantia
mediosinistra**

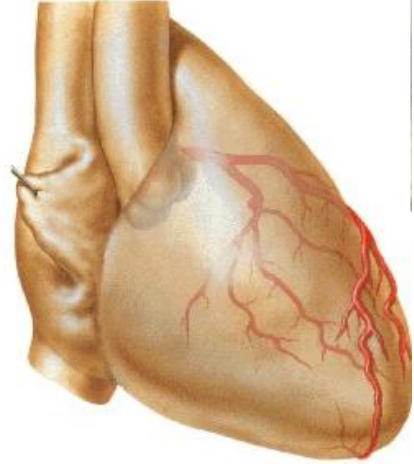
**Transverse
line = DMd+DMs**

Length

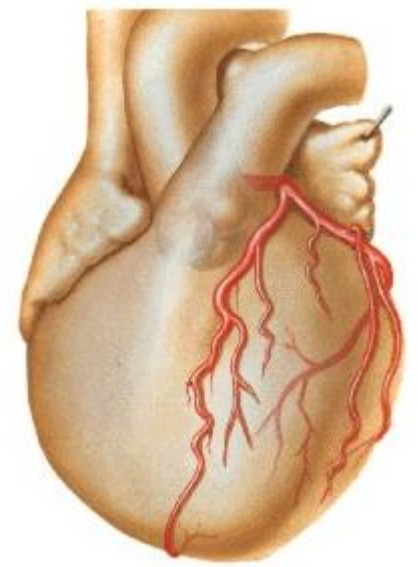
Gradient

Area

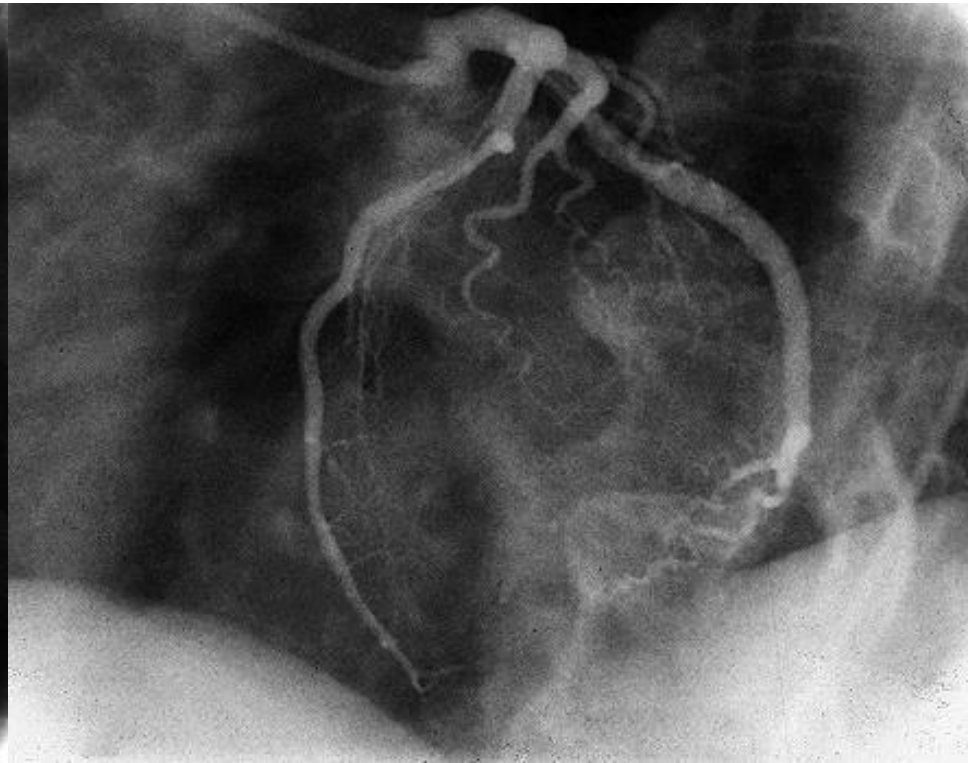
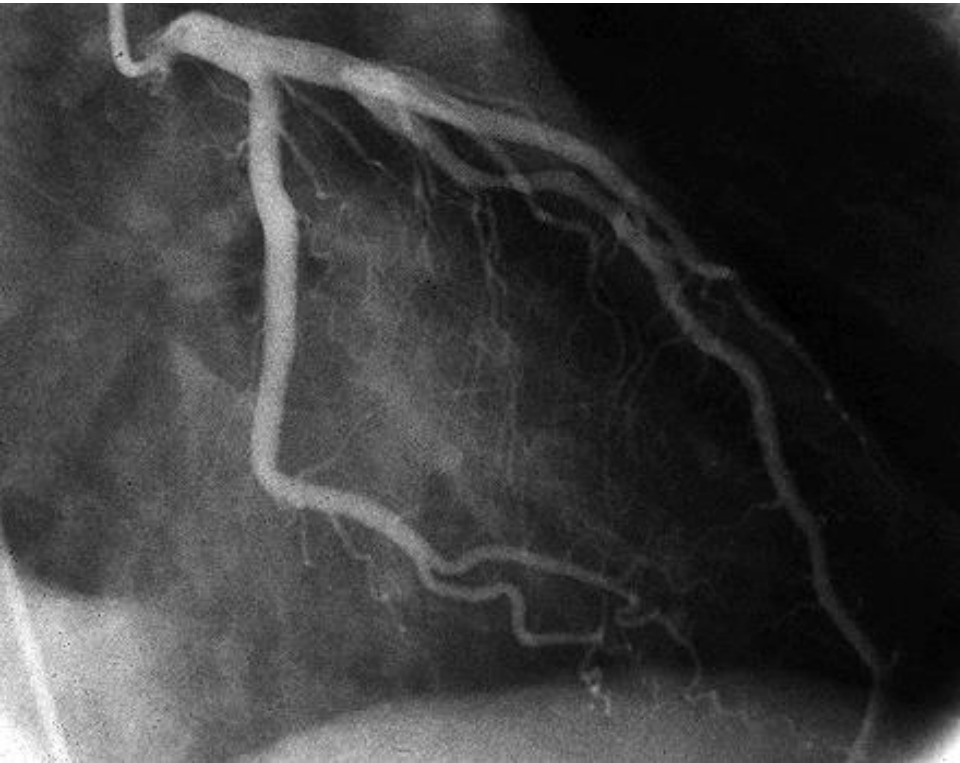
Coronary angiography – left coronary artery



Right anterior oblique projection

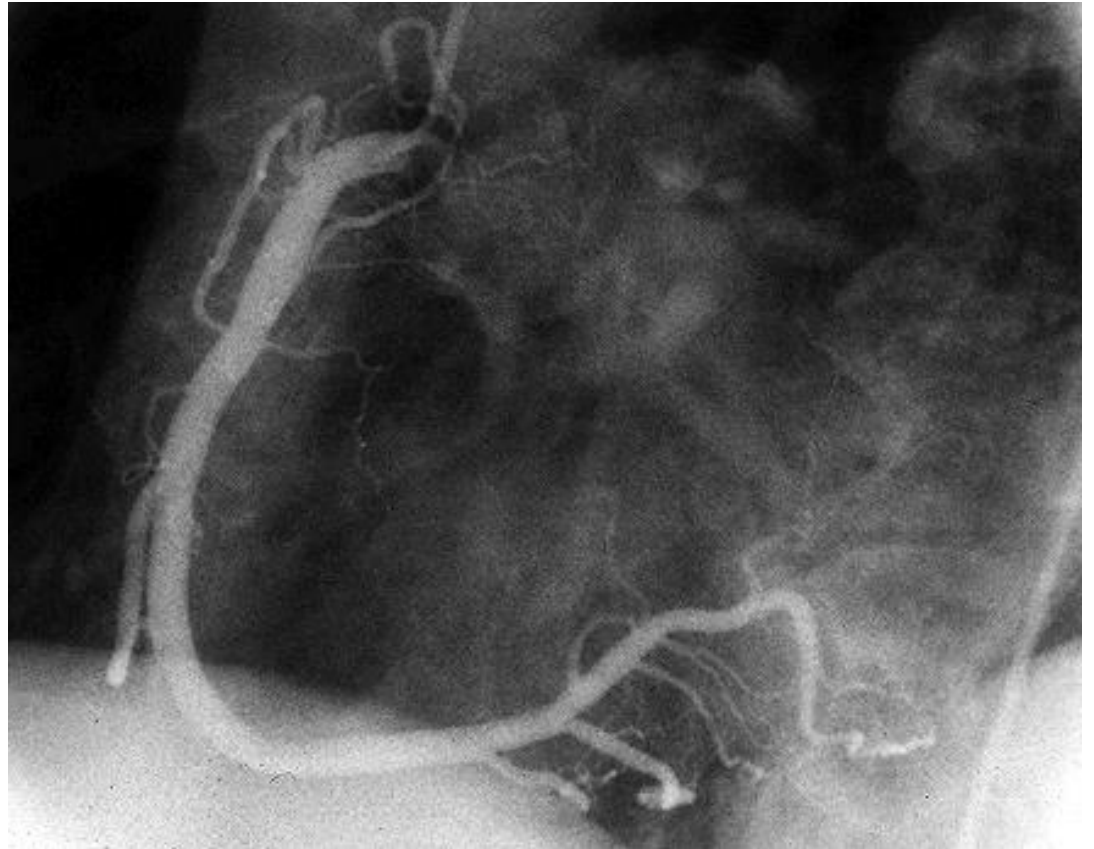
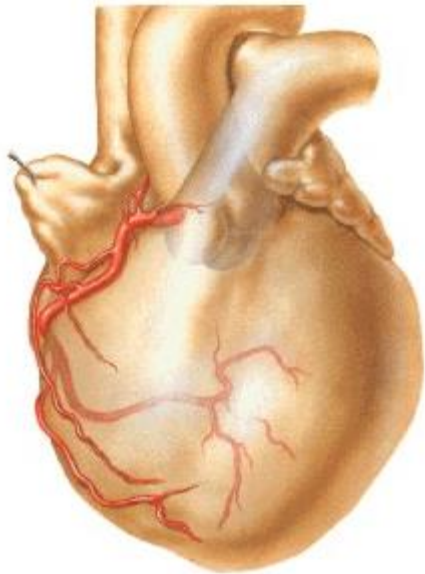


Left anterior oblique projection



Coronary angiography – right coronary artery

Left anterior oblique projection



Illustrations were copied from:

**Atlas der Anatomie des Menschen/Sobotta.
Putz,R., und Pabst,R. 20. Auflage. München:
Urban & Schwarzenberg, 1993**

**Netter: Interactive Atlas of Human Anatomy.
Windows Version 2.0**

**Čihák R: Anatomie 2 (Splanchnologia). Avicenum,
zdravotnické nakladatelství, Praha, 1988.**