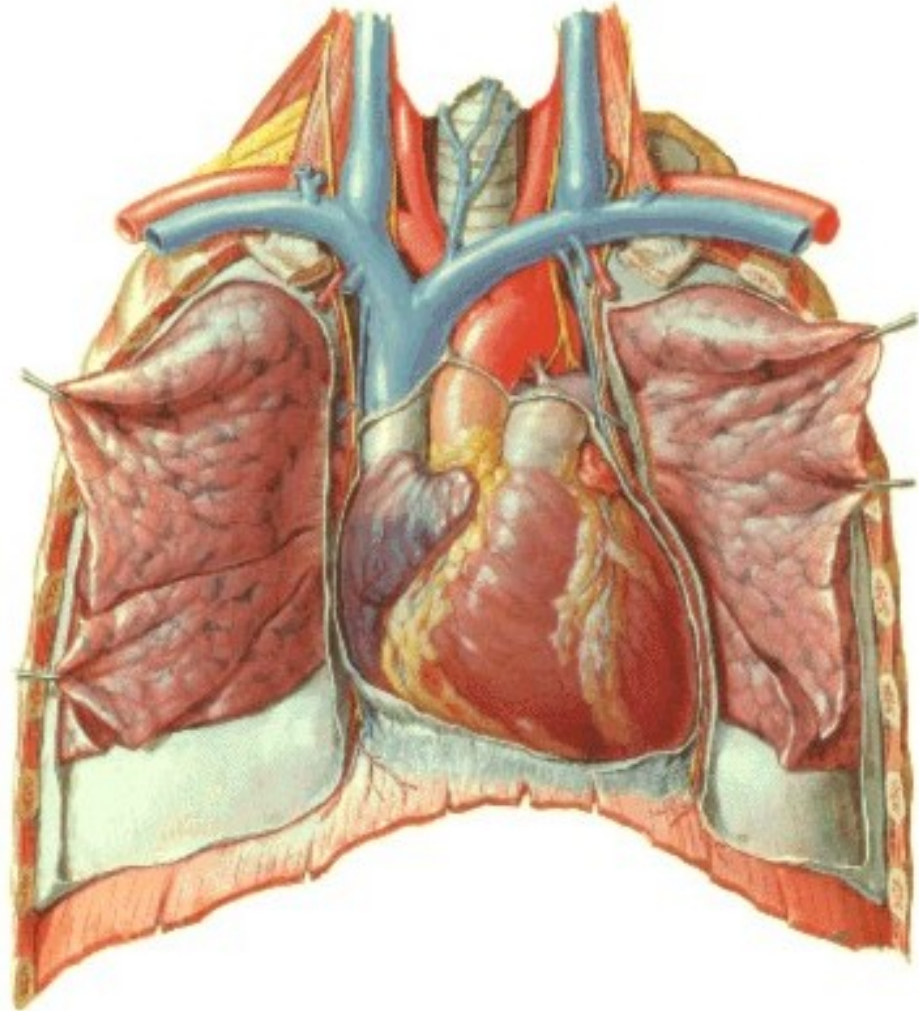
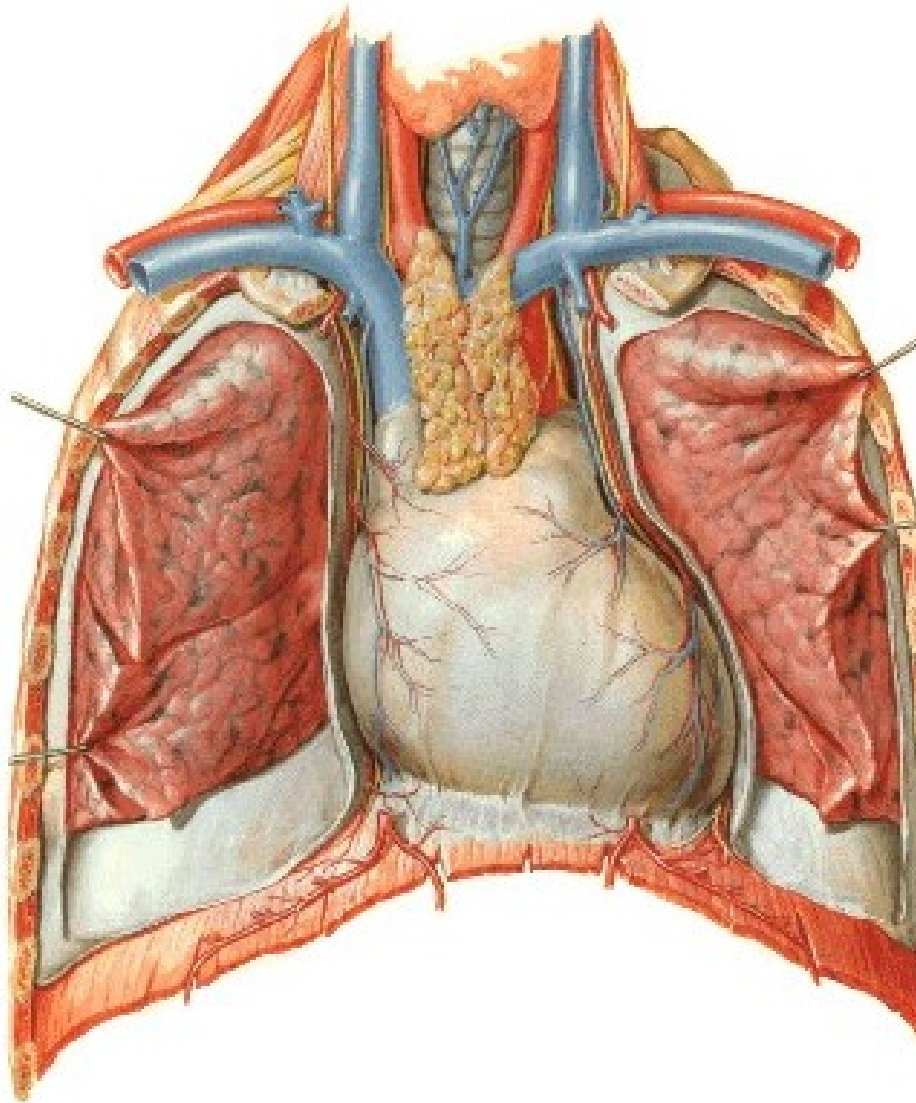
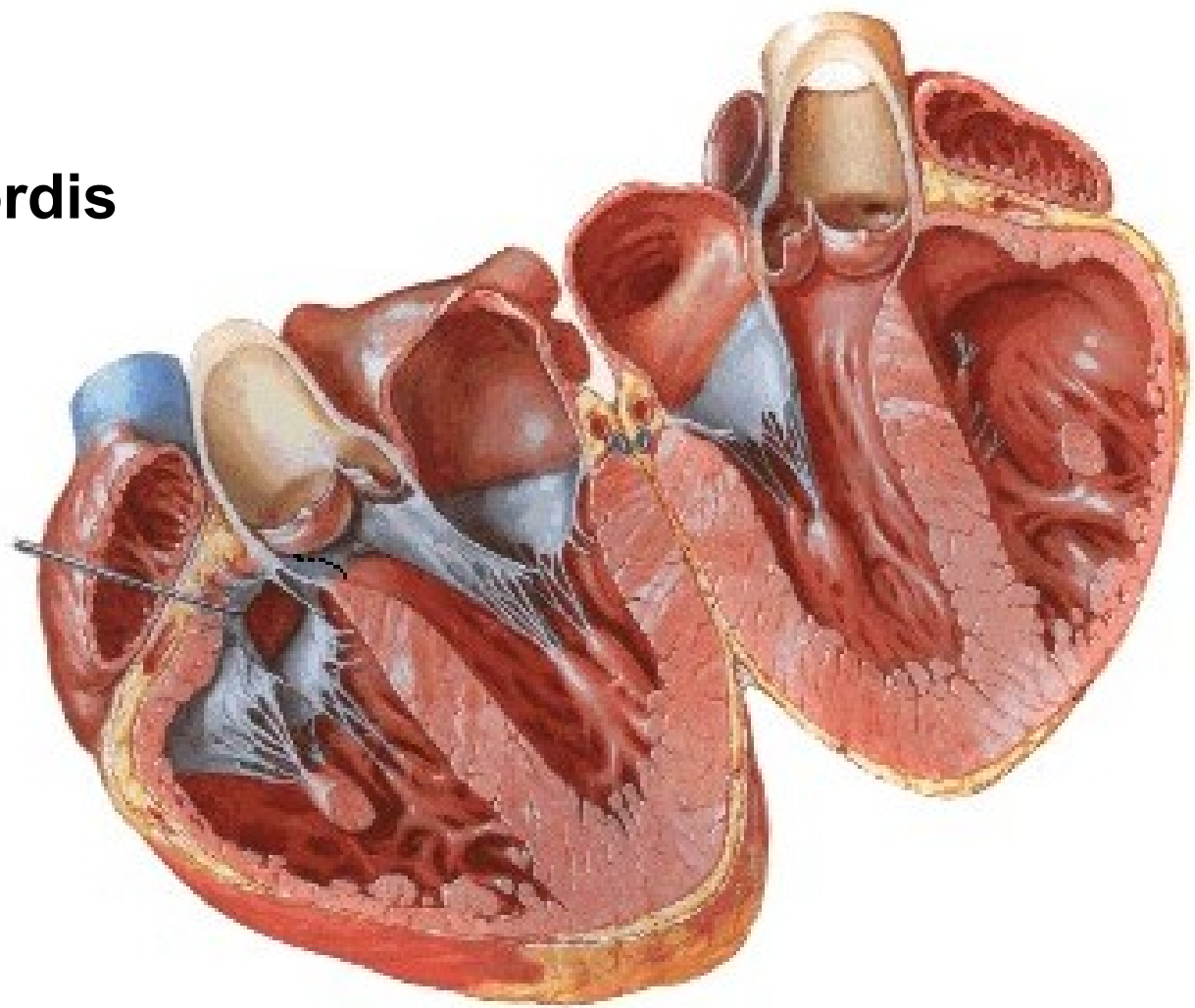


**HEART**

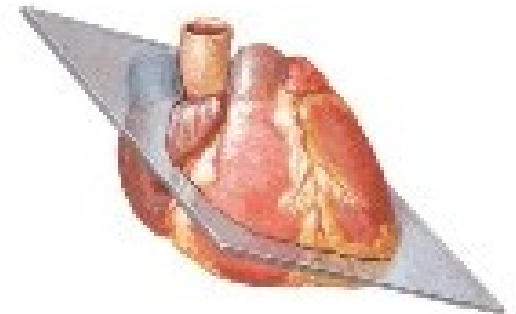
# COR



**Atrium cordis**  
**Ventriculus cordis**



**Septum interatriale**  
**Septum interventriculare**



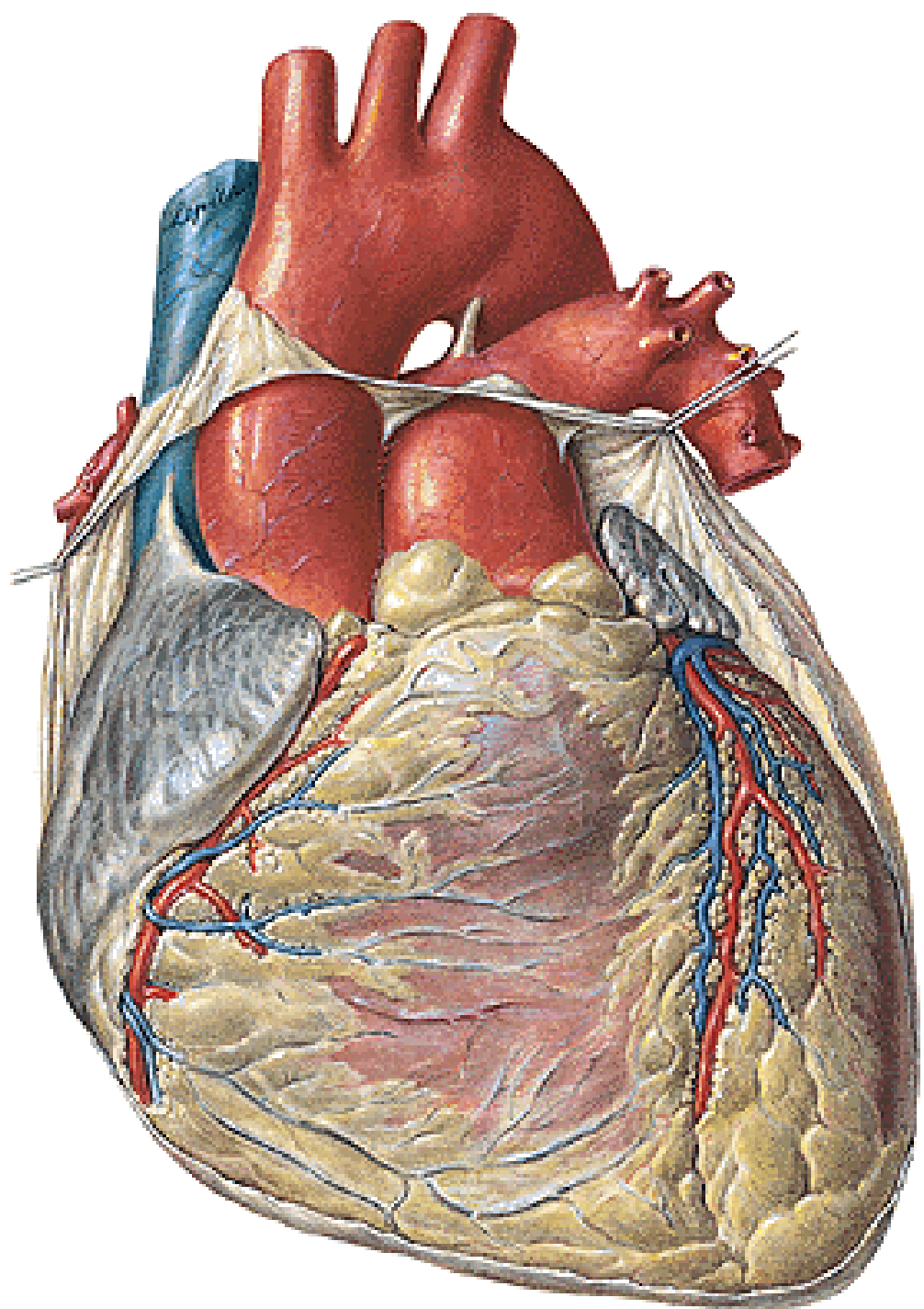
# COR

**Atrium dextrum**

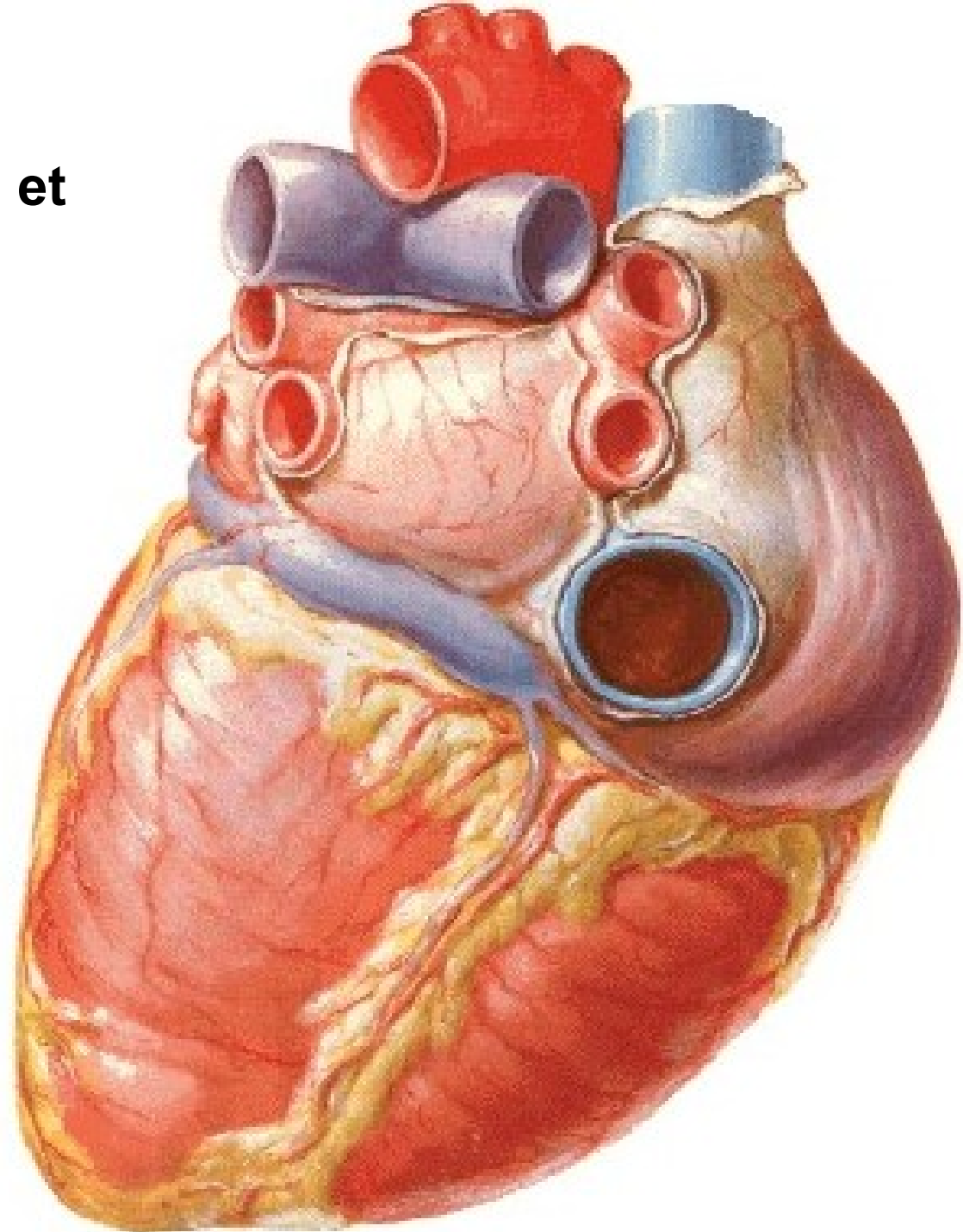
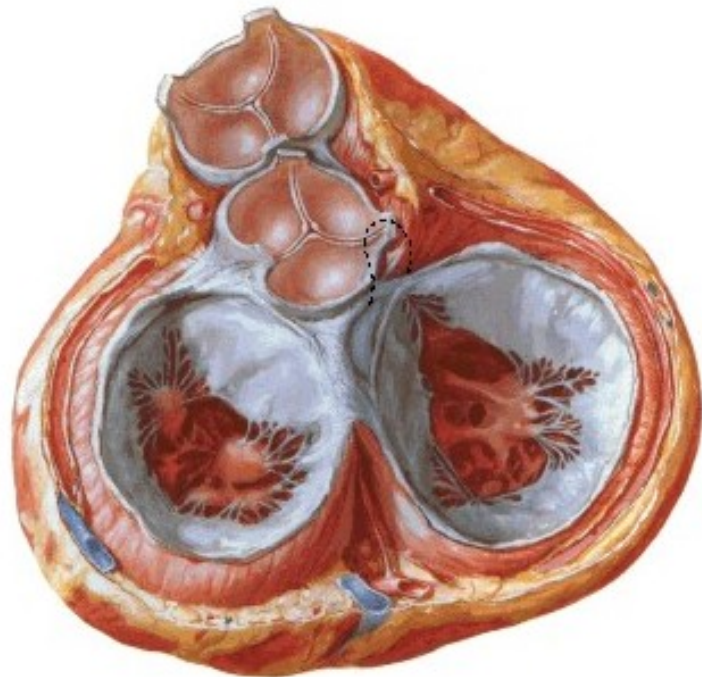
- vena cava sup. et inf.

**Ventriculus dexter**

- truncus pulmonalis



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





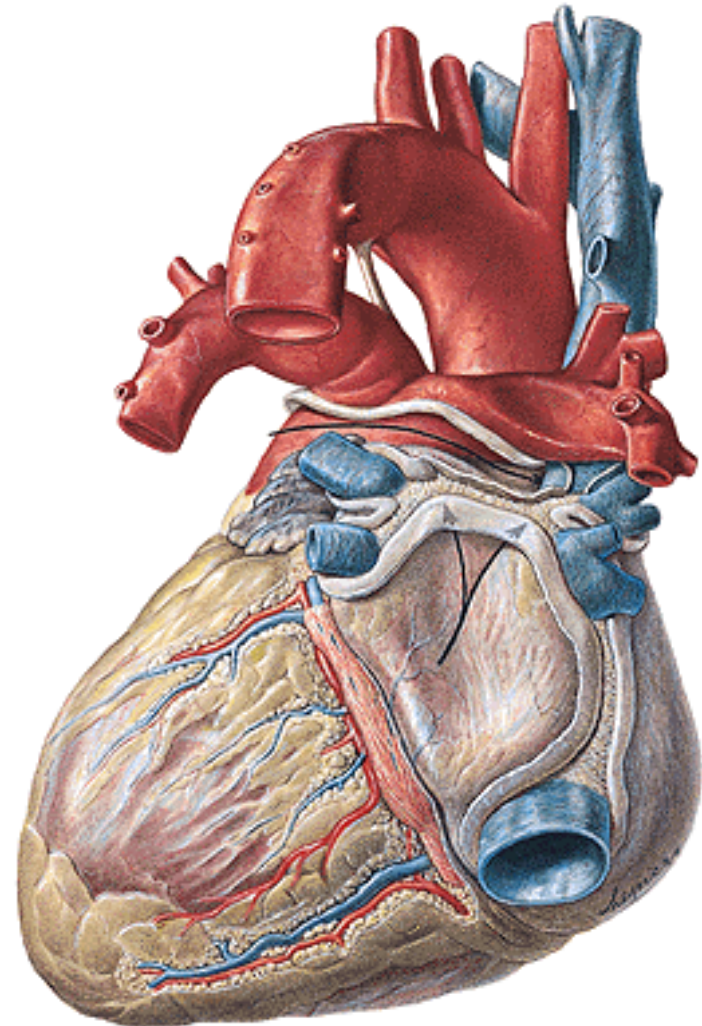
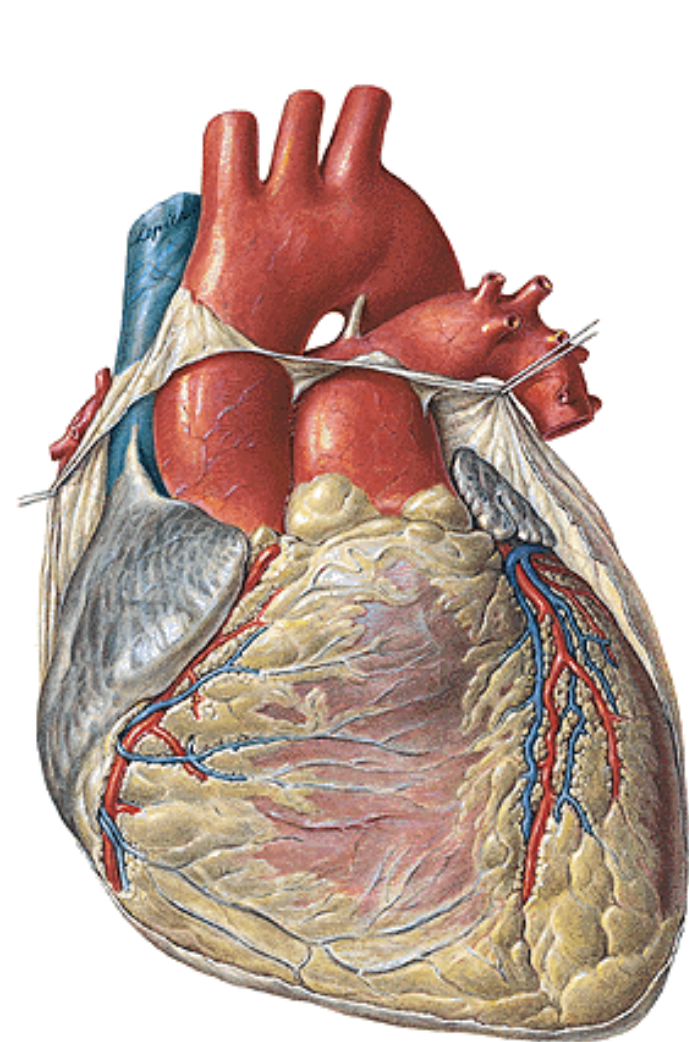
**Basis, apex**

**Facies sternocostalis, diaphragmatica, pulmonalis sin.**

**Margo dexter (acutus)**

**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**

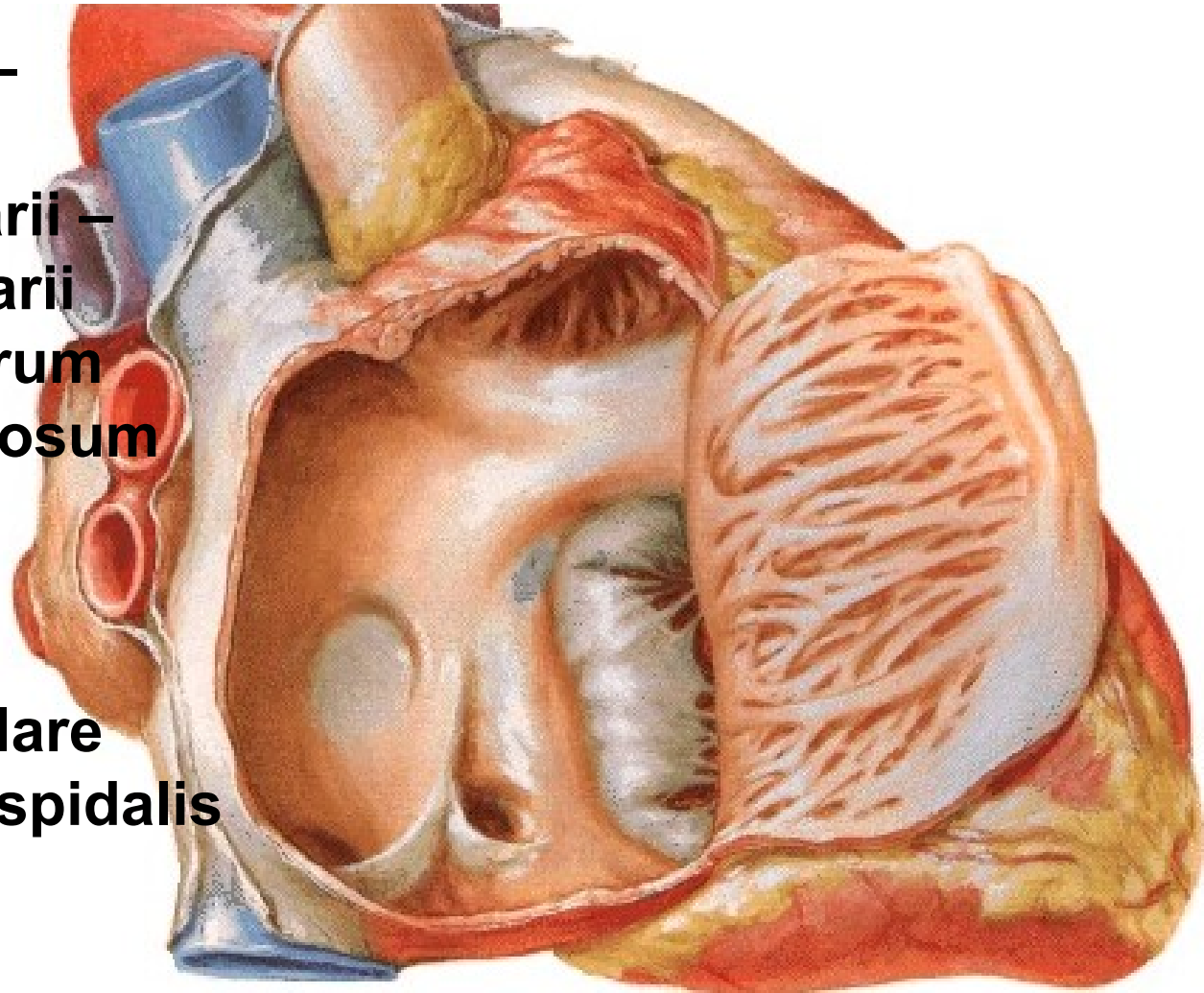
**Sinus venarum cavarum**

**Tuberculum intervenosum**

**Crista terminalis**

**Auricula dextra –  
musculi pectinati**

**Ostium atrioventriculare  
dextrum - valva tricuspidalis**



# **VENTRICULUS DEXTER**

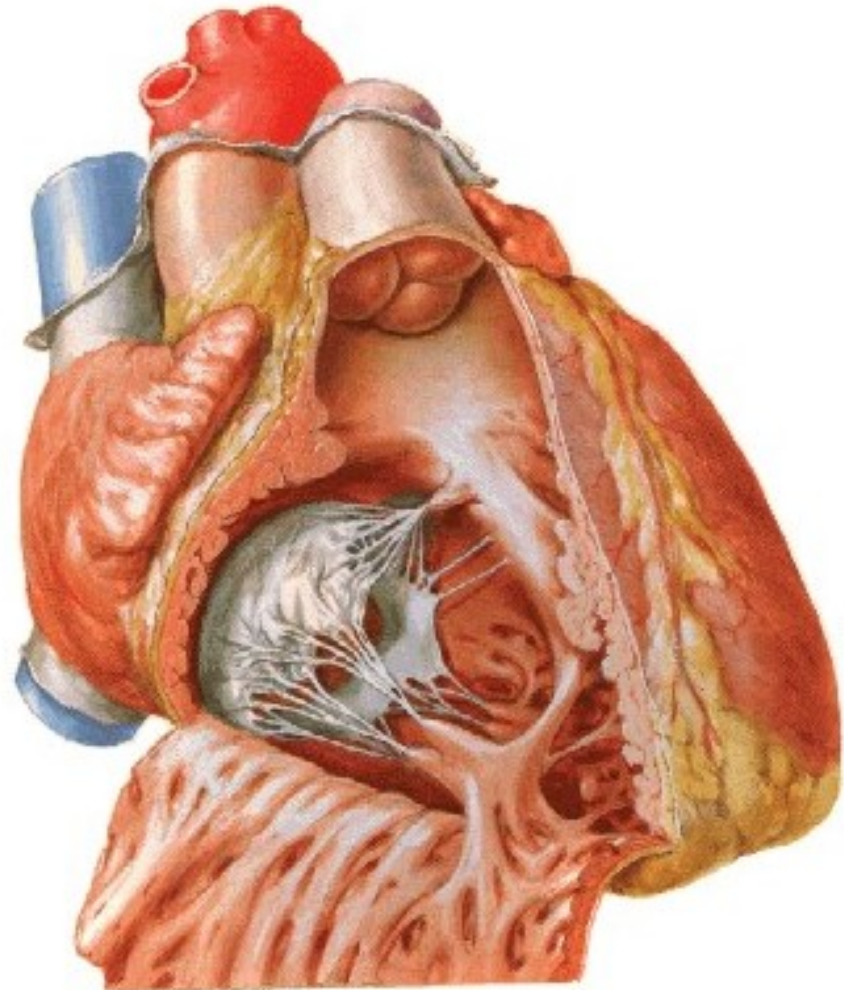
**Pars trabecularis - trabeculae carnea**

**Ostium atrioventriculare dextrum, valva tricuspidalis**  
– cuspis ant., septalis, post.

**Musculi papillares (anterior, posterior, septales)**

**Trabecula septomarginalis**

**Chordae tendineae**



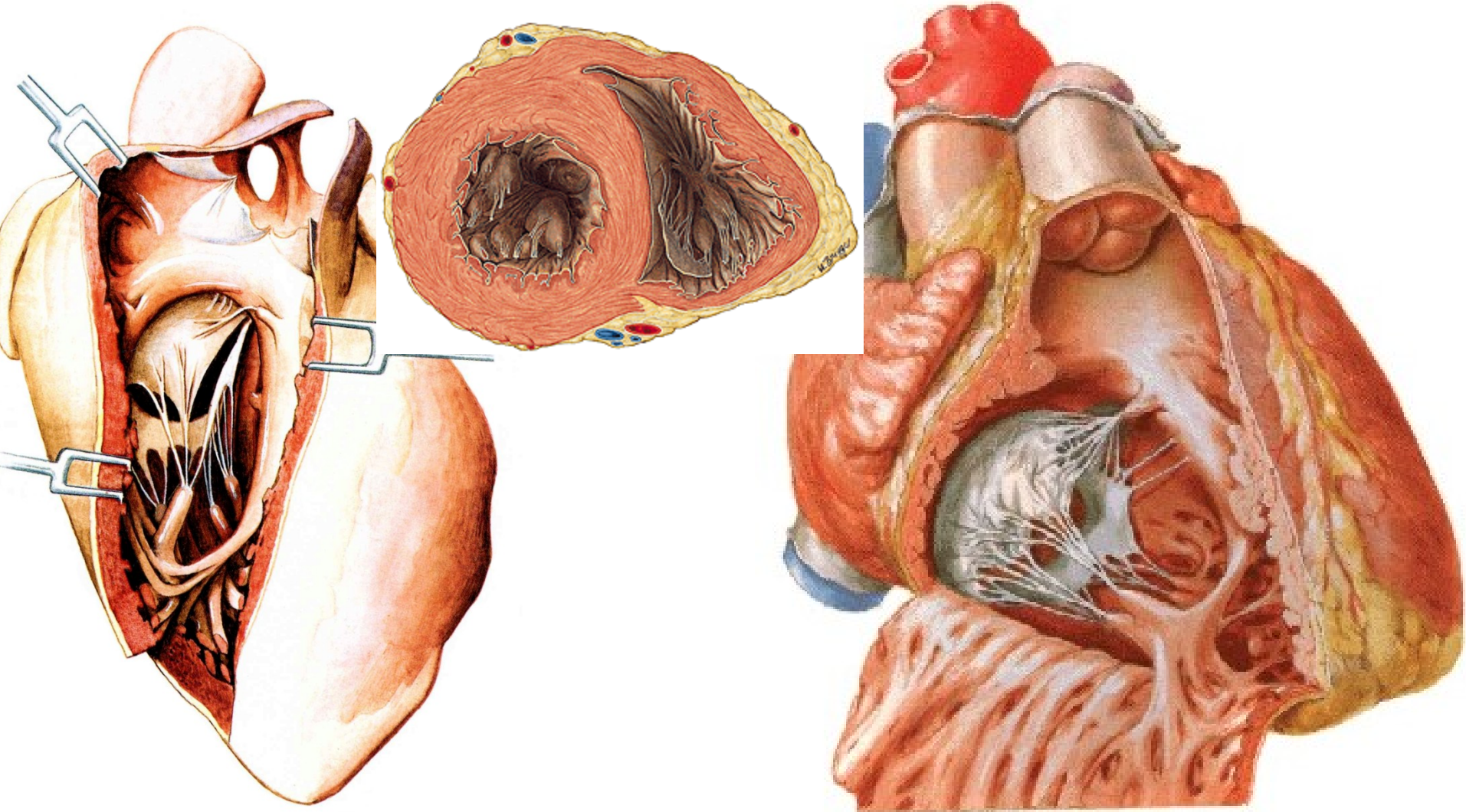


# VENTRICULUS DEXTER

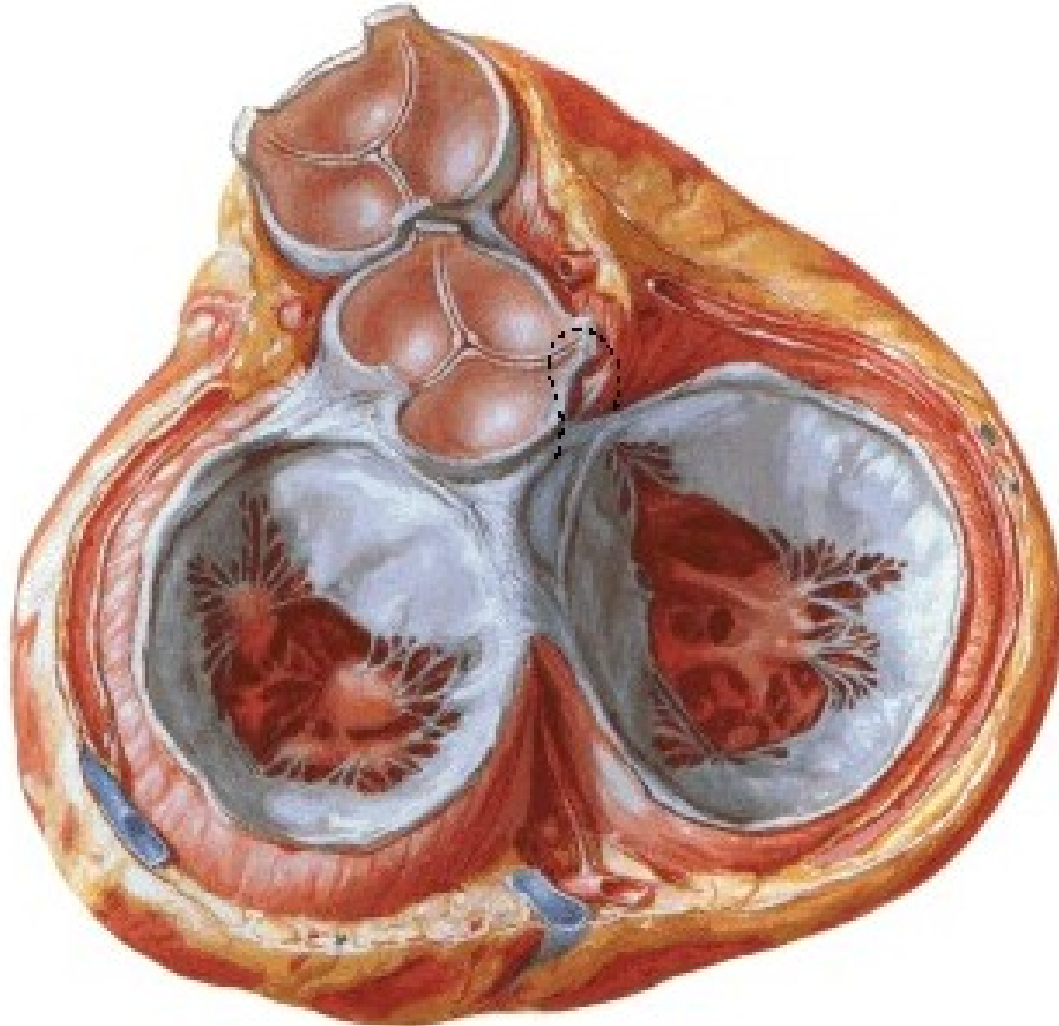
Infundibulum (conus arteriosus)

Crista supraventricularis

Ostium trunci pulmonalis – valva trunci pulmonalis



**Valva trunci pulmonalis:  
valvula semilunaris ant., dx., sin. – lunula, nodulus, sinus**



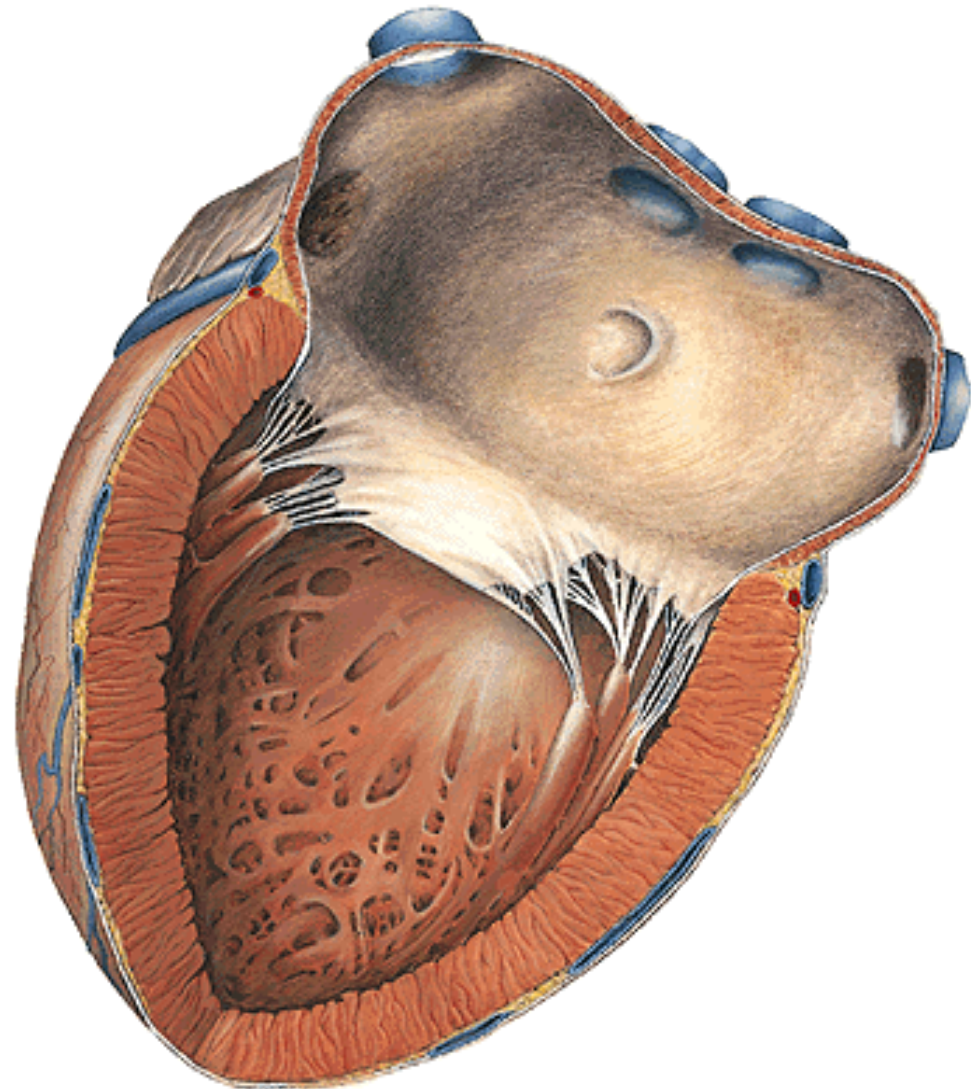
# ATRIUM SINISTRUM

Ostia venarum pulmonalium

Auricula sinistra

Musculi pectinati

Septum interatriale –  
fossa ovalis

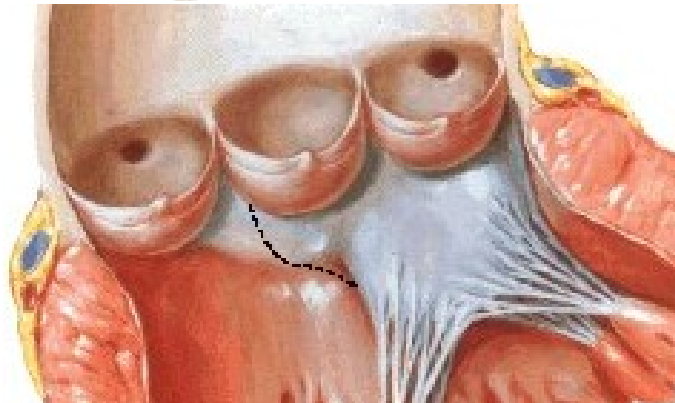
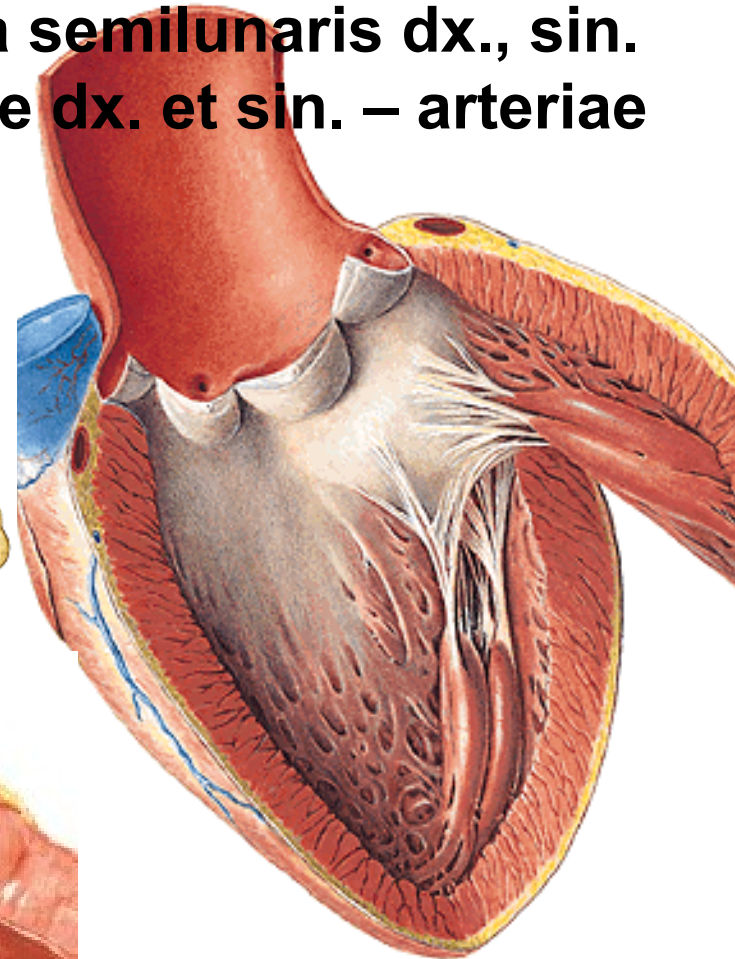
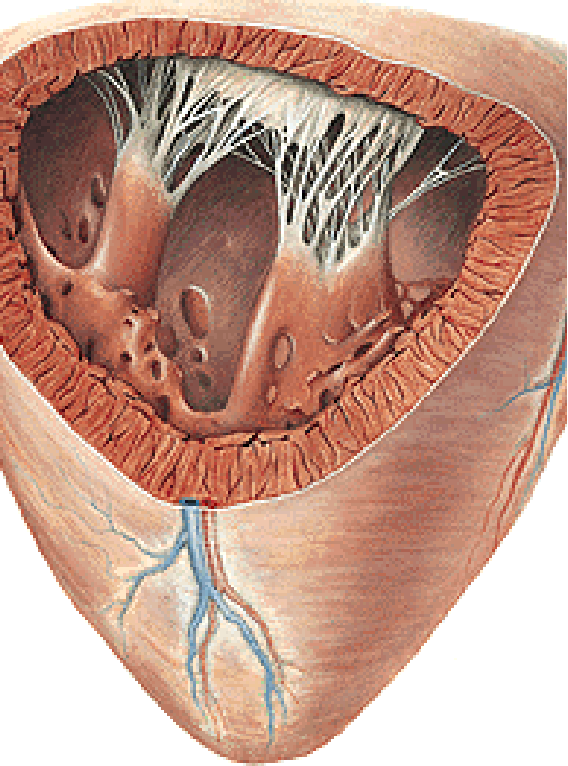




# VENTRICULUS SINISTER

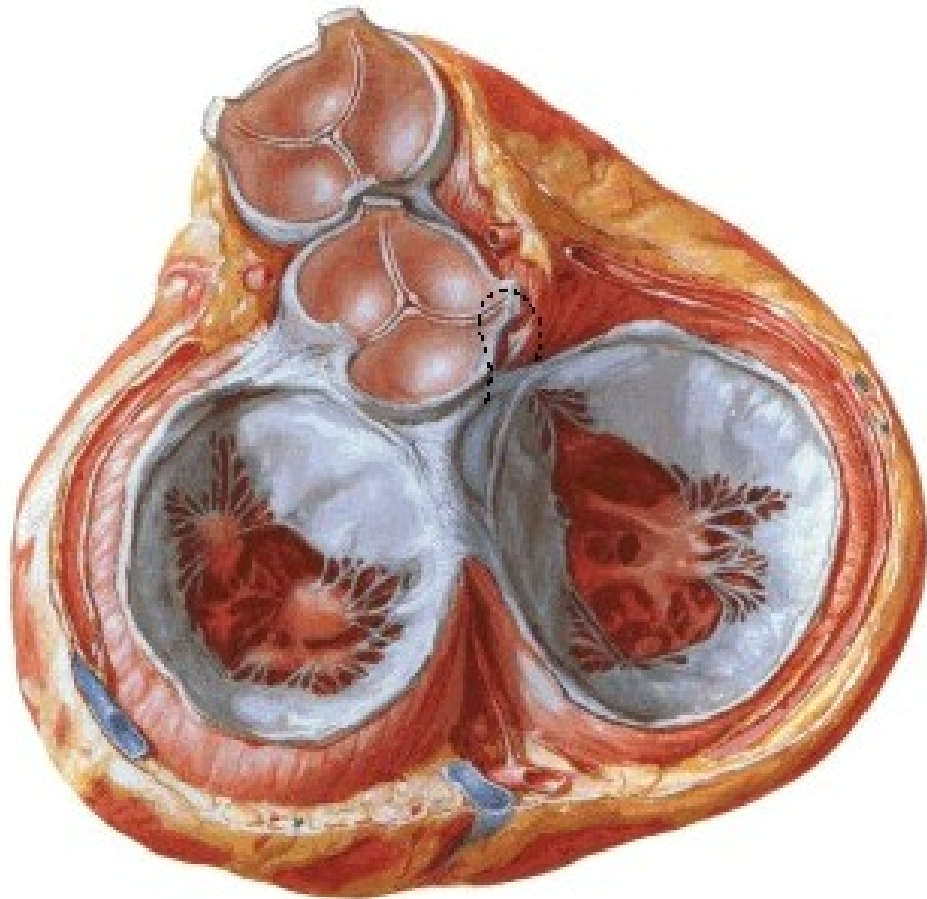
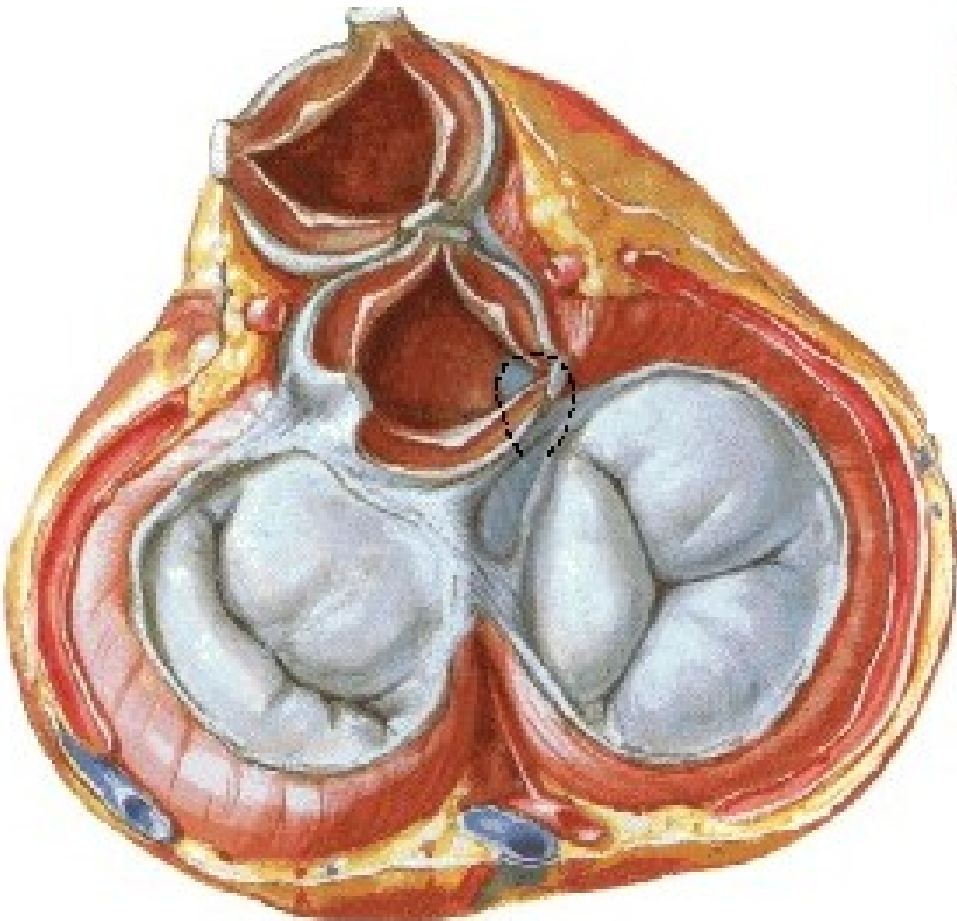
Ostium atrioventriculare sin.– valva bicuspidalis (mitralis) – cuspis ant. et post. – m. papillaris ant. et post. – chordae tendineae

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



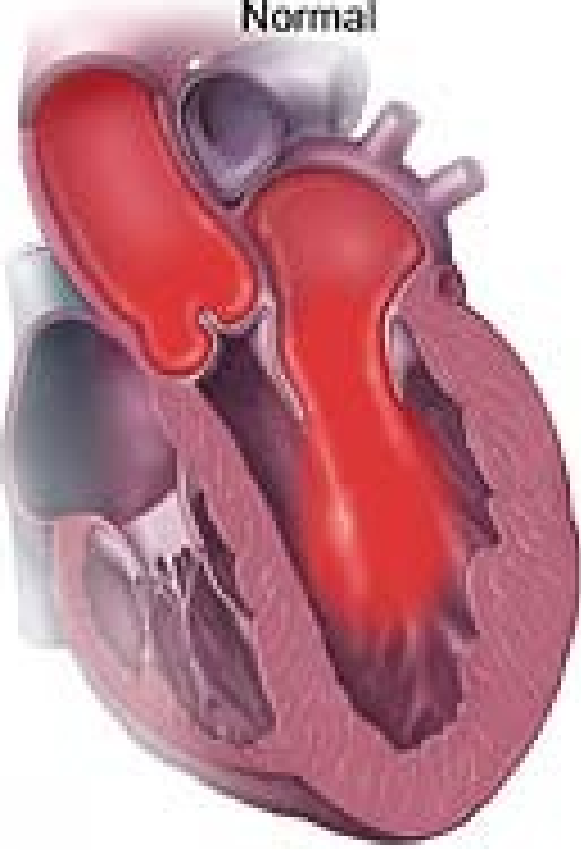


**SYSTOLE**

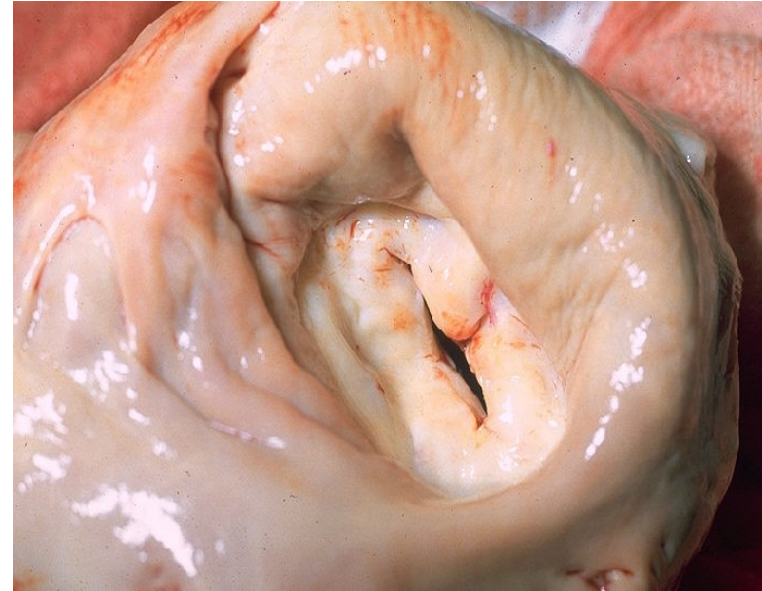
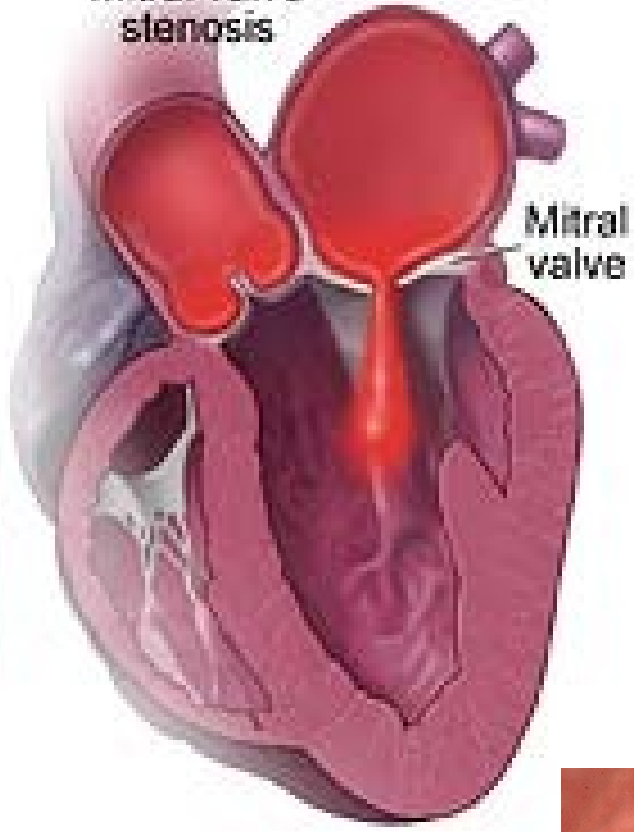


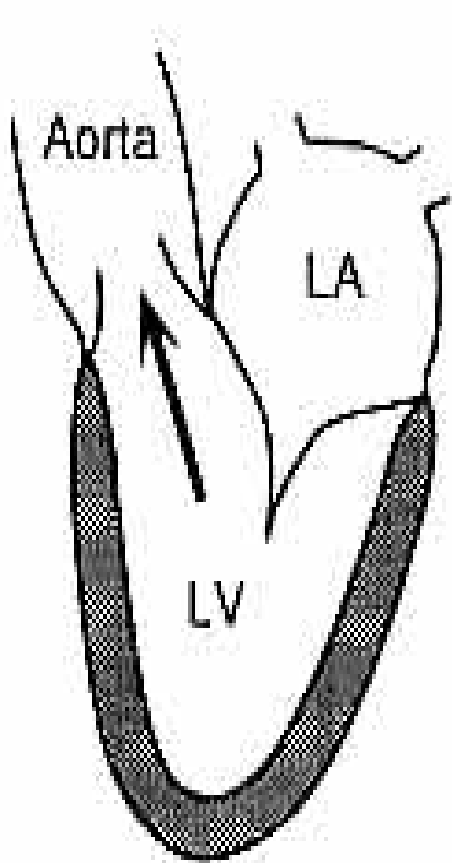
**DIASTOLE**

Normal

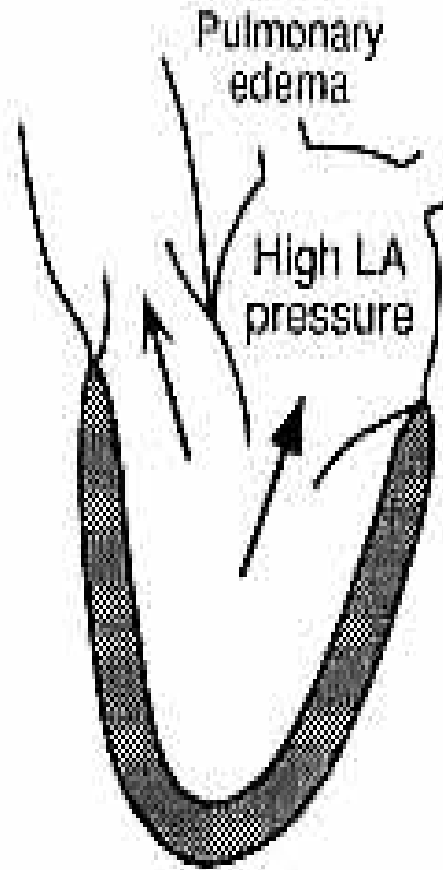


Mitral valve stenosis

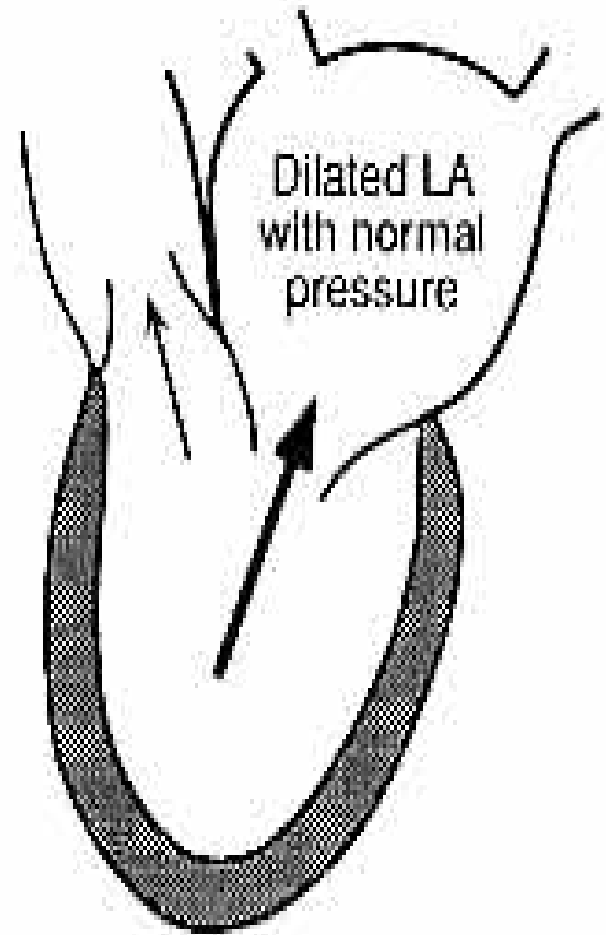




NORMAL  
(SYSTOLE)

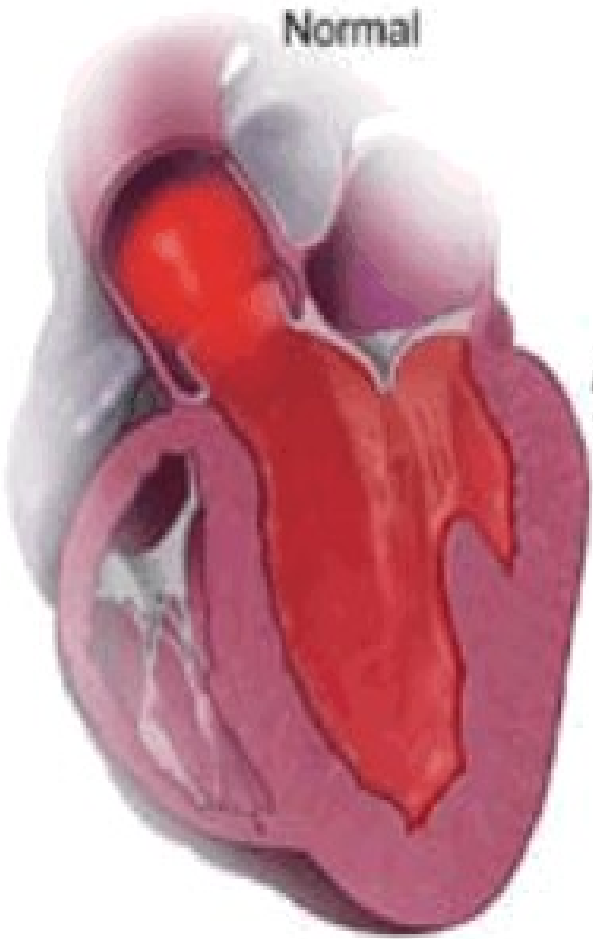


ACUTE  
MITRAL  
REGURGITATION



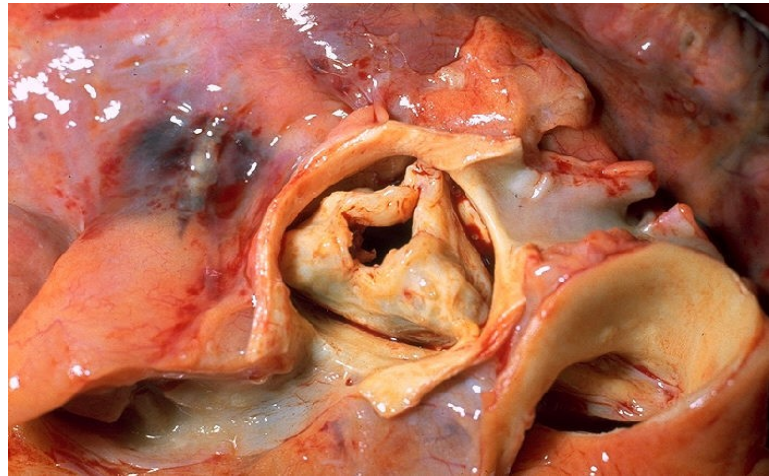
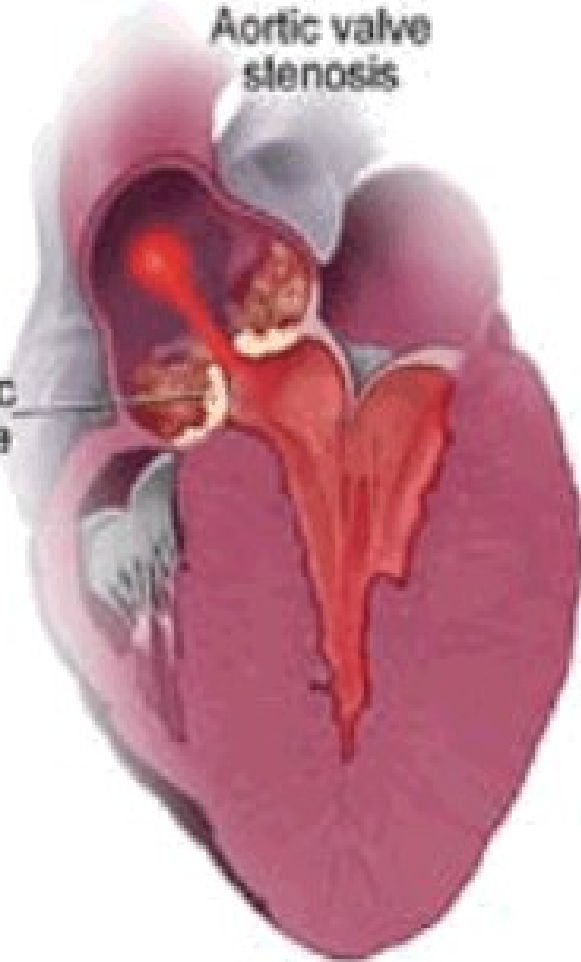
CHRONIC  
MITRAL  
REGURGITATION

Normal



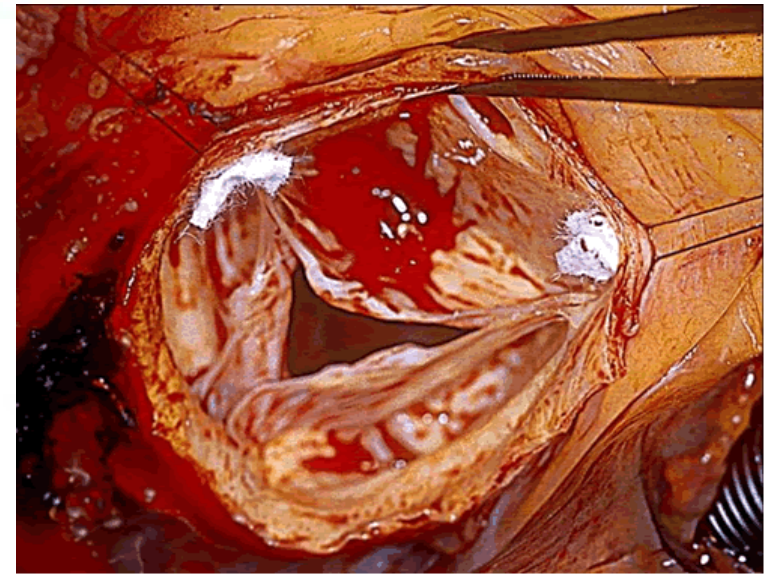
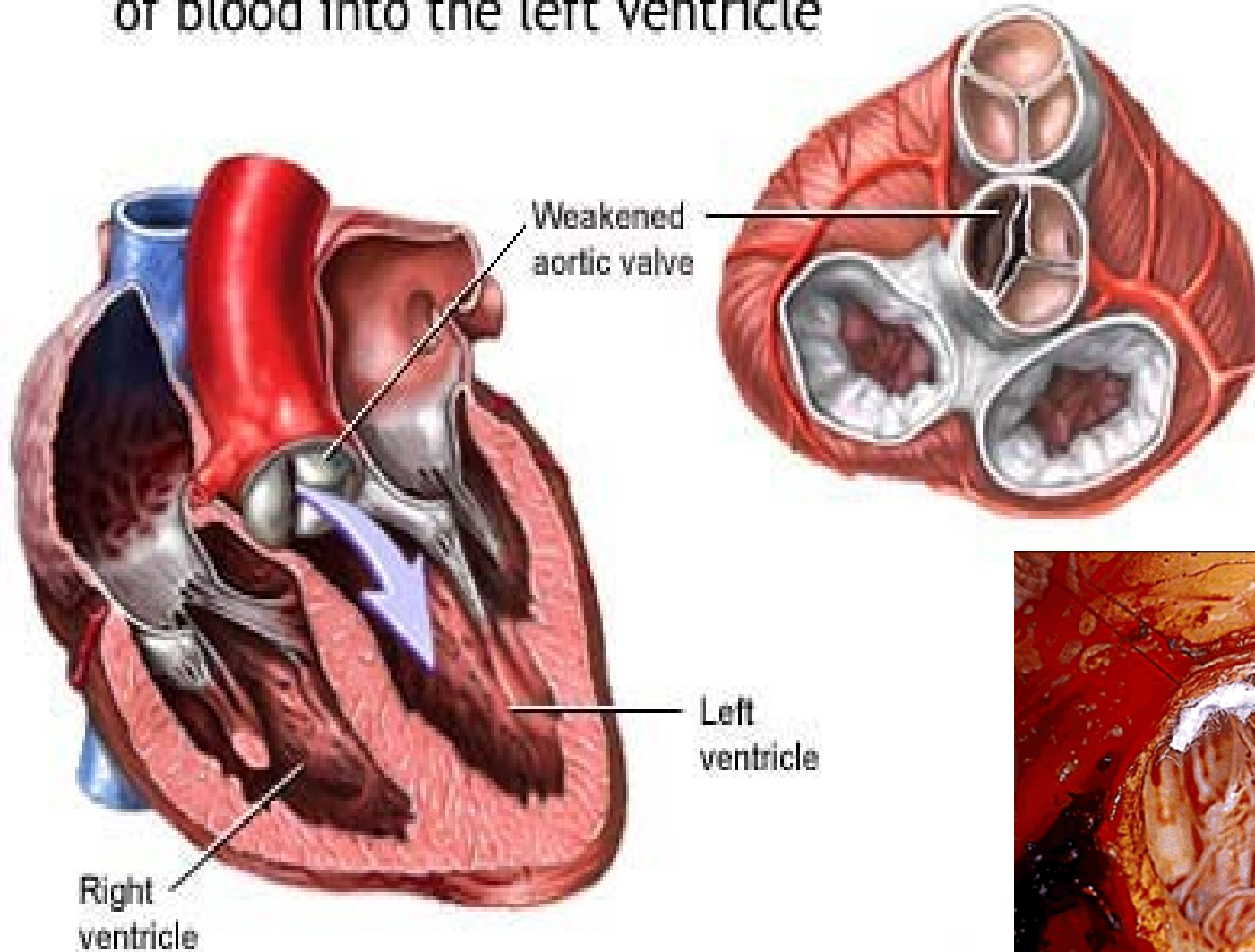
Aortic valve stenosis

Aortic valve





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



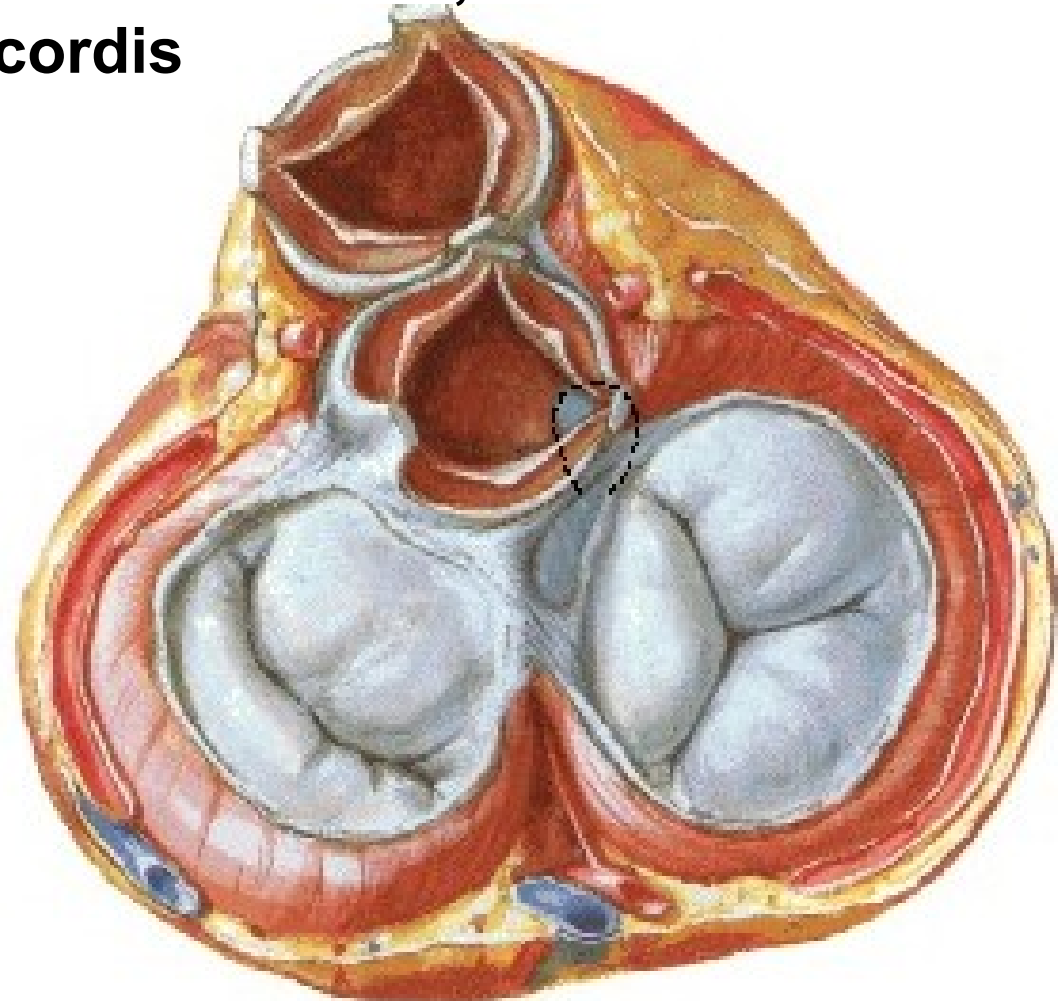
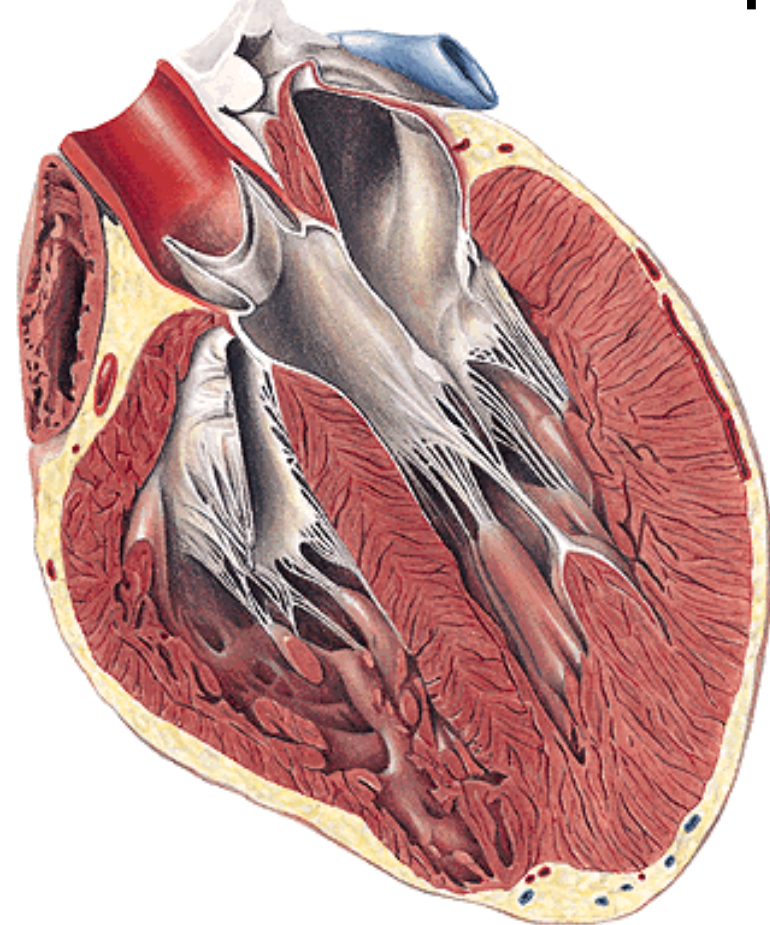
**Endocardium, myocardium, pericardium**

## **SKELETON OF THE HEART**

**Anulus fibrosus dexter, sinister, aorticus, trunci pulmonalis**

**Trigonum fibrosum dextrum et sinistrum, tendo infundibuli**

**Pars membranacea septi cordis**



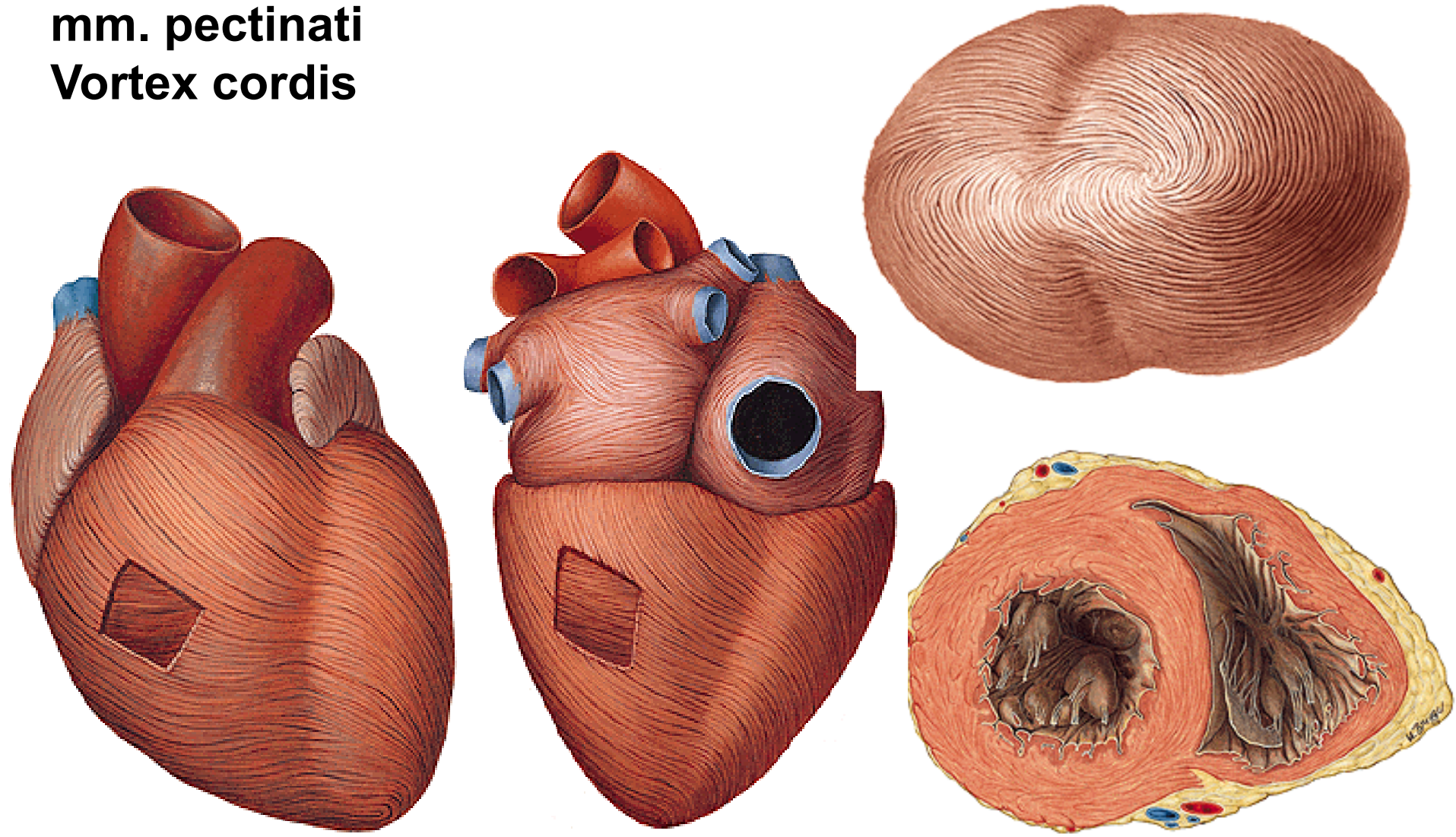
# MYOCARDIUM

**Fasciculus interauricularis horizontalis et verticalis**

**Fasciculus terminalis, intervenosus, limbicus sup. et inf.**

**mm. pectinati**

**Vortex cordis**





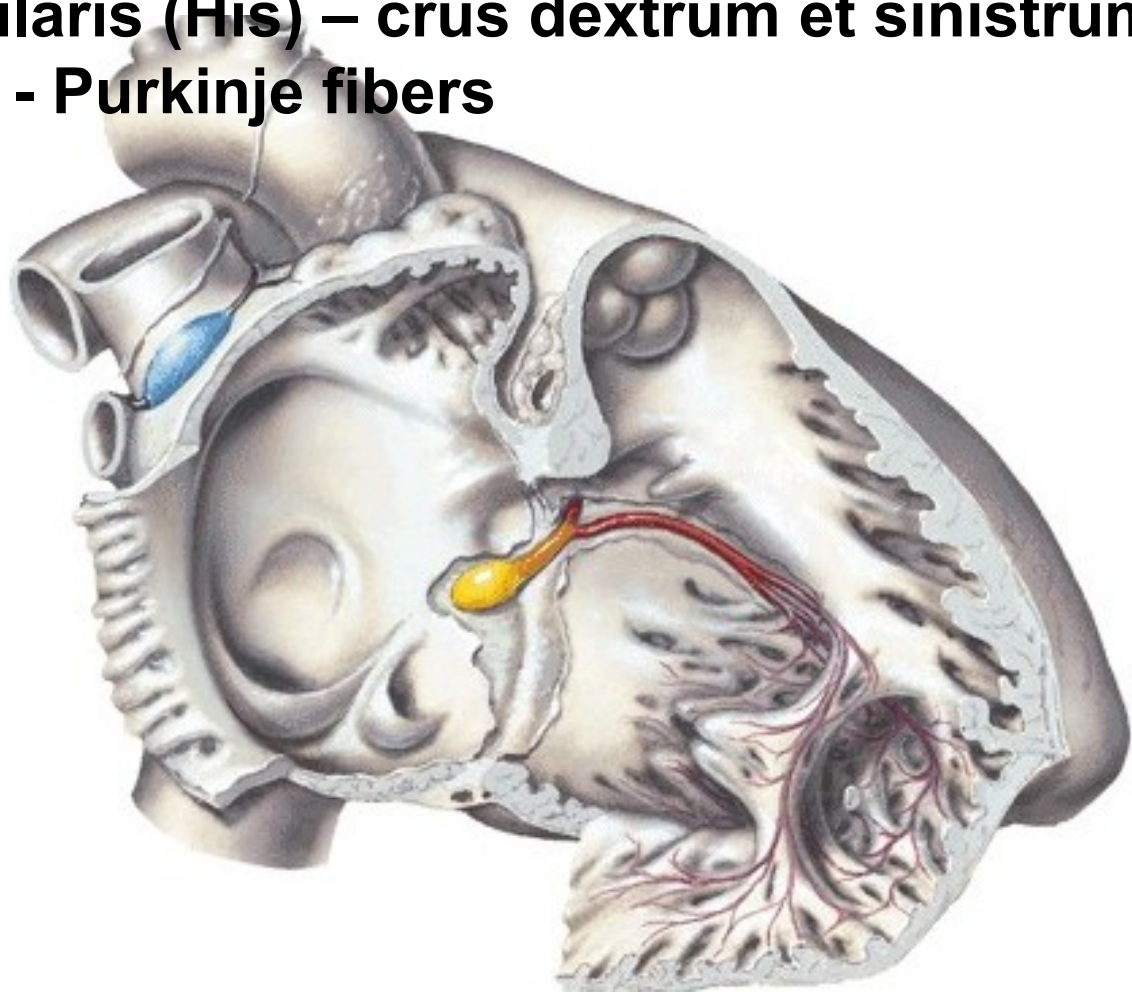
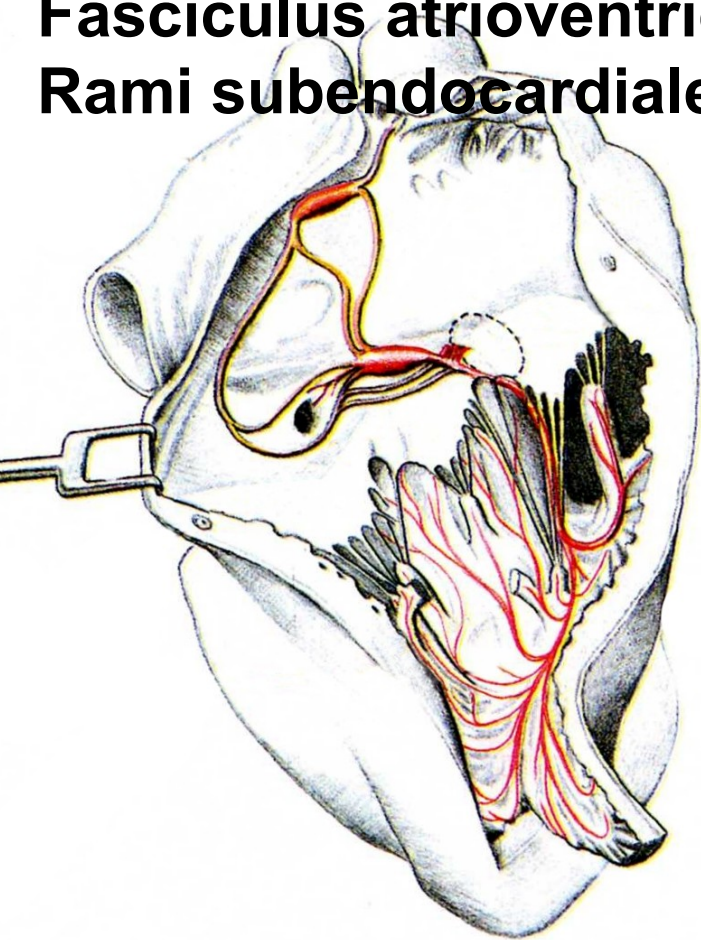
# COMPLEXUS STIMULANS CORDIS

**Nodus sinuatrialis (Bachmann interatrial, anterior, middle and posterior internodal tracts)**

**Nodus atrioventricularis (accessory AV connections – Kent fibres)**

**Fasciculus atrioventricularis (His) – crus dextrum et sinistrum**

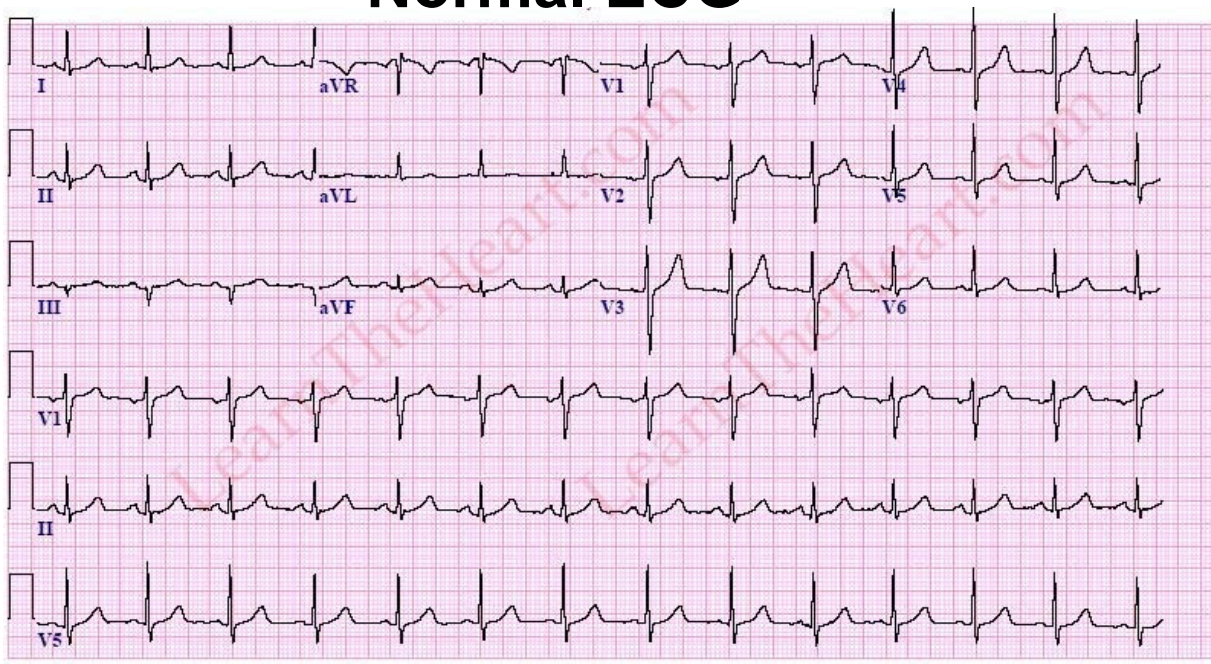
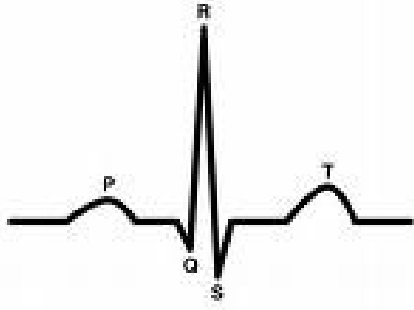
**Rami subendocardiales - Purkinje fibers**





# ECG

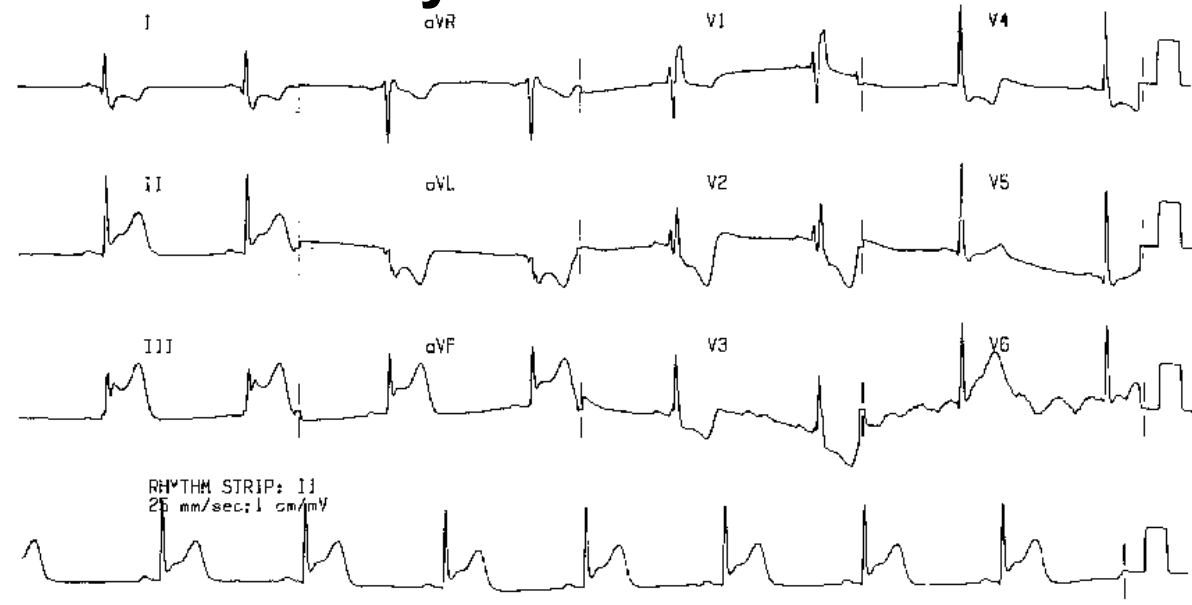
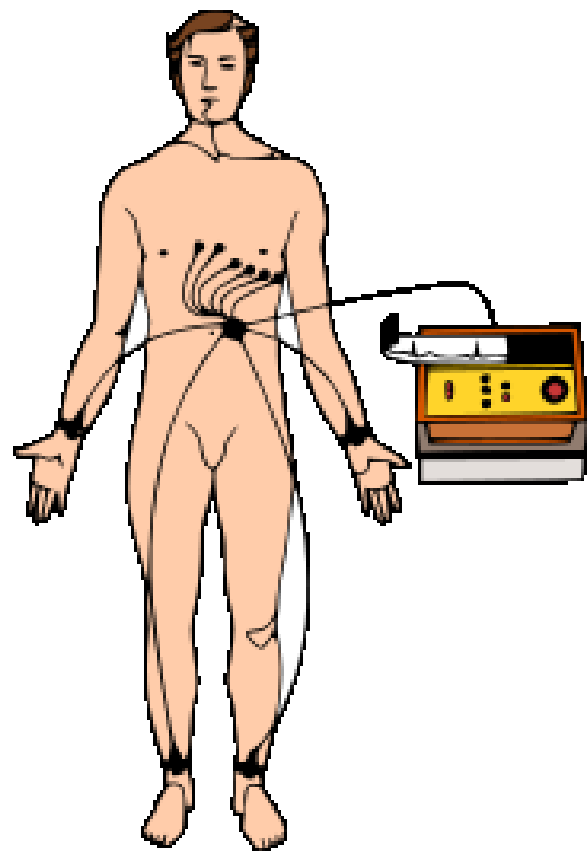
## Normal ECG



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

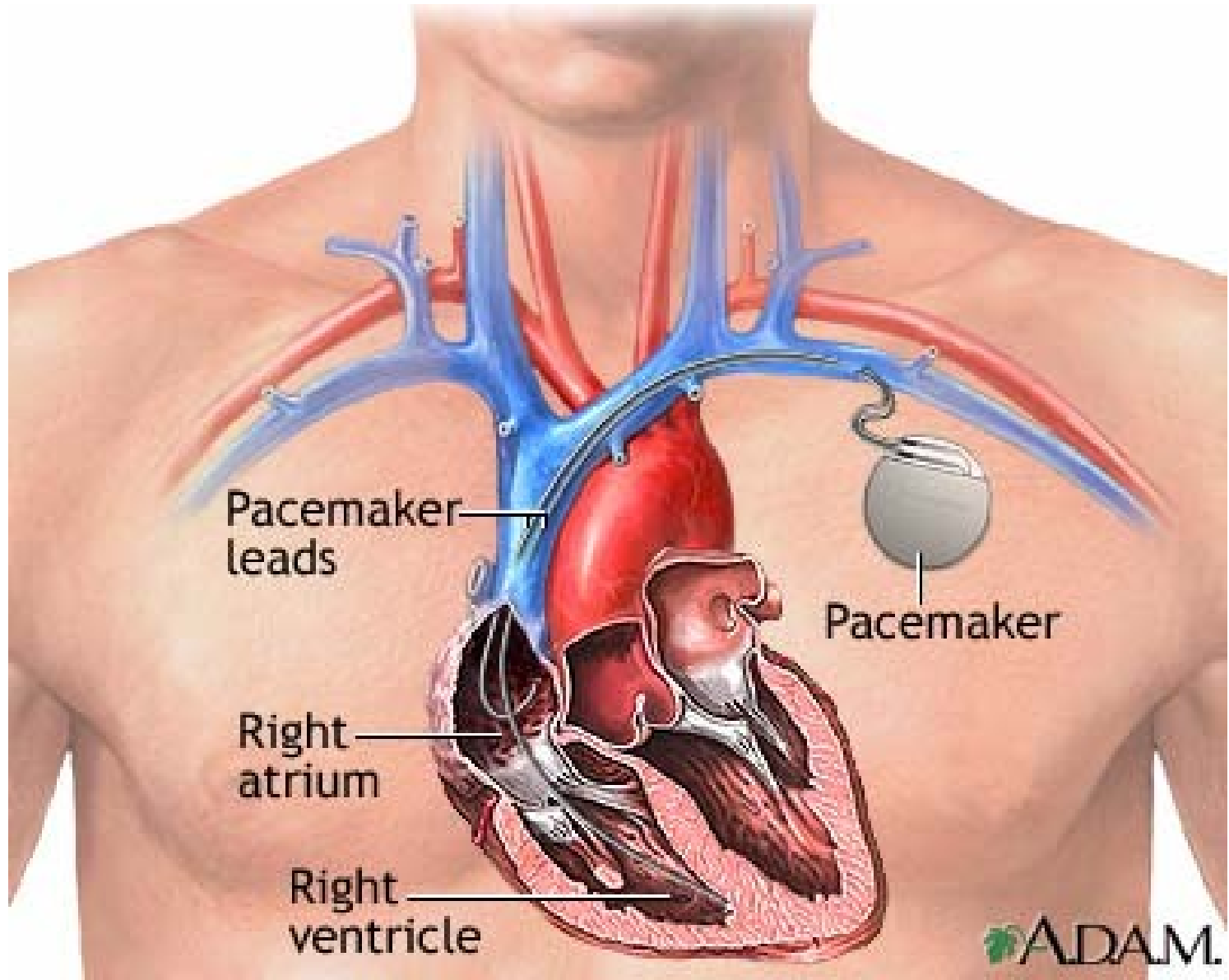
EID: Unconfirmed EDT: ORDER:

## Myocardial infarction



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

# Artificial pacemaker



# PERICARDIUM FIBROSUM

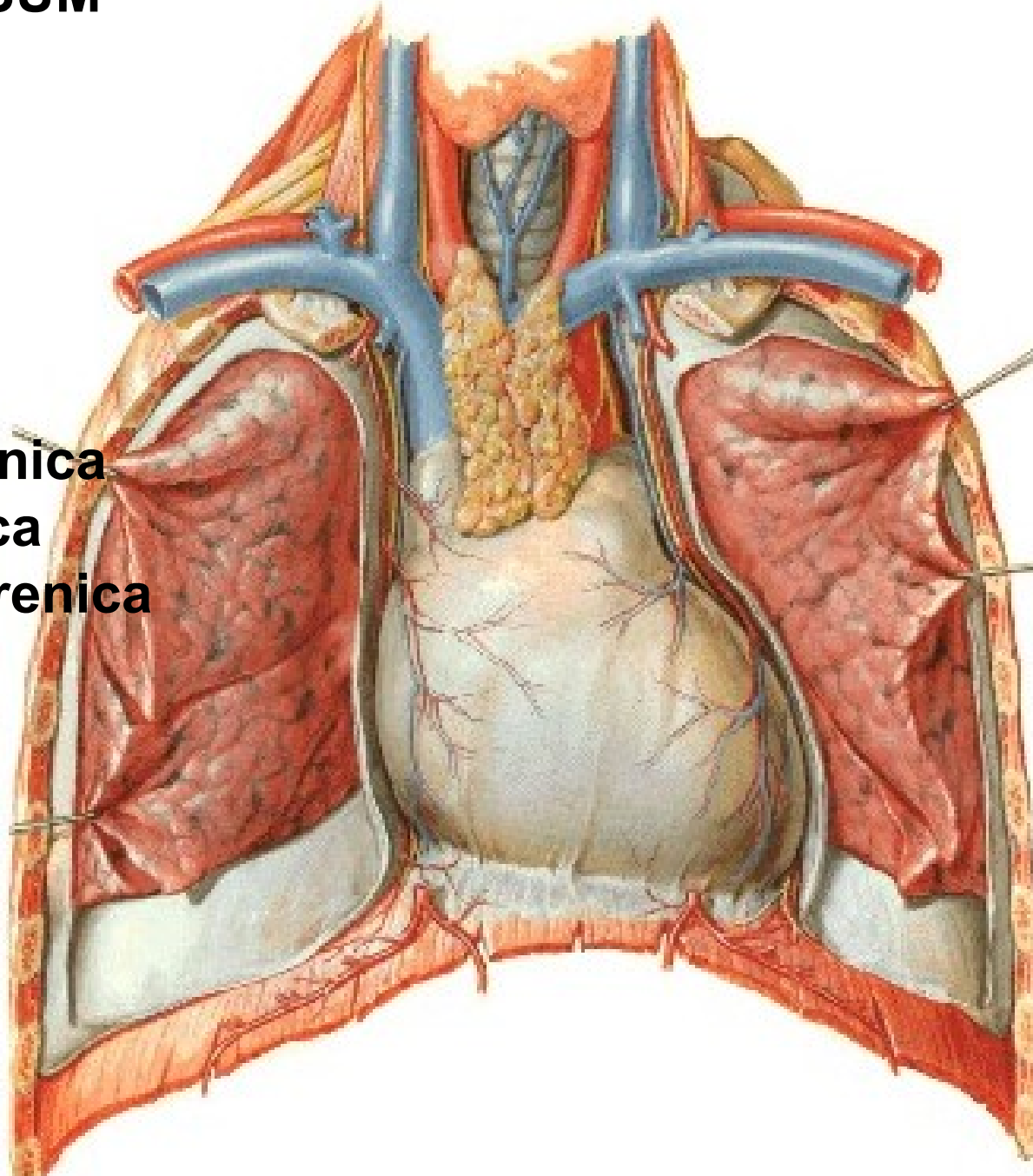
- basis
- cupula
- pars sternalis,
- partes laterales
- pars dorsalis

Ligg. pericardiacophrenica

Ligg. sternopericardiaca

A. et v. pericardiacophrenica

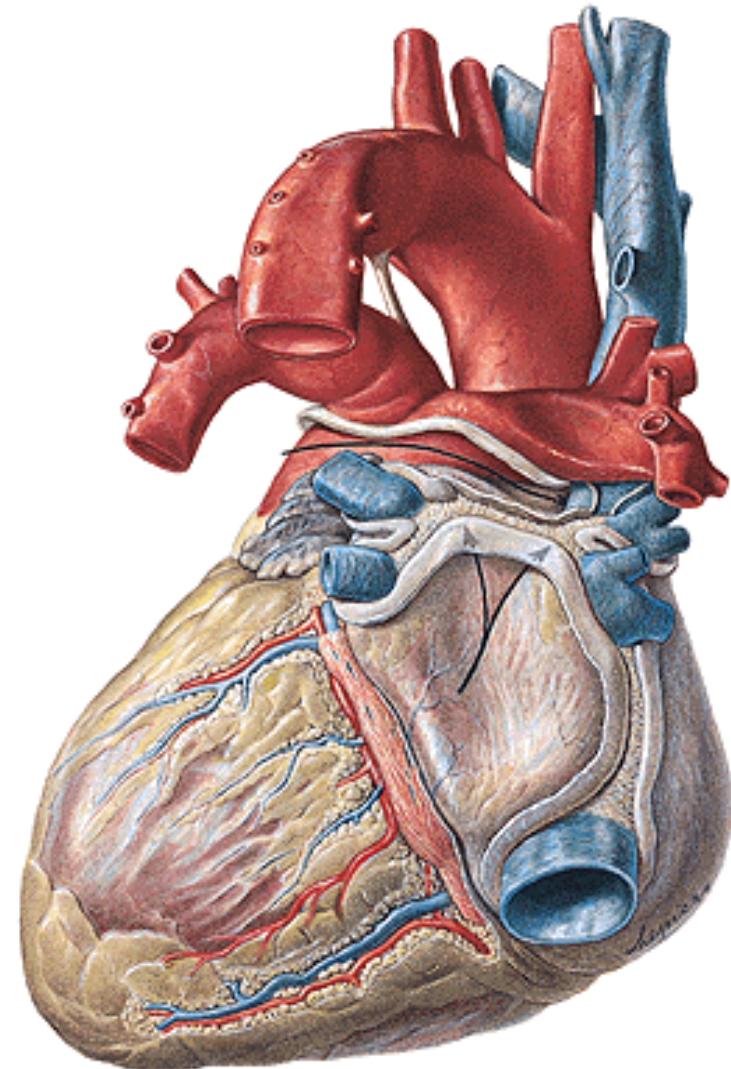
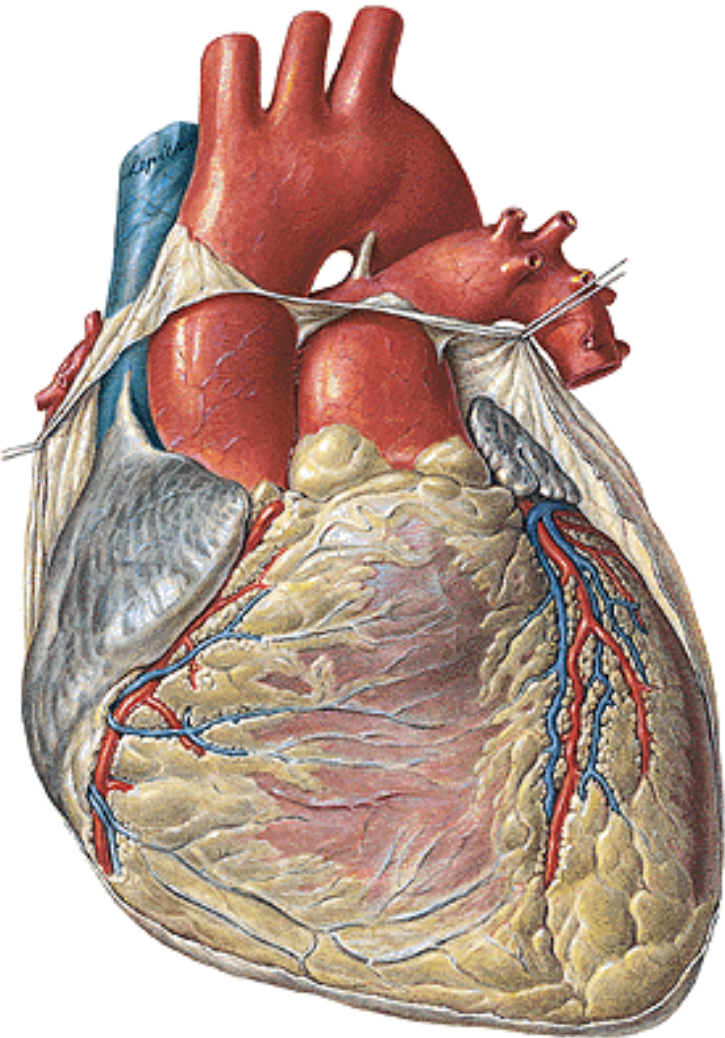
N. phrenicus





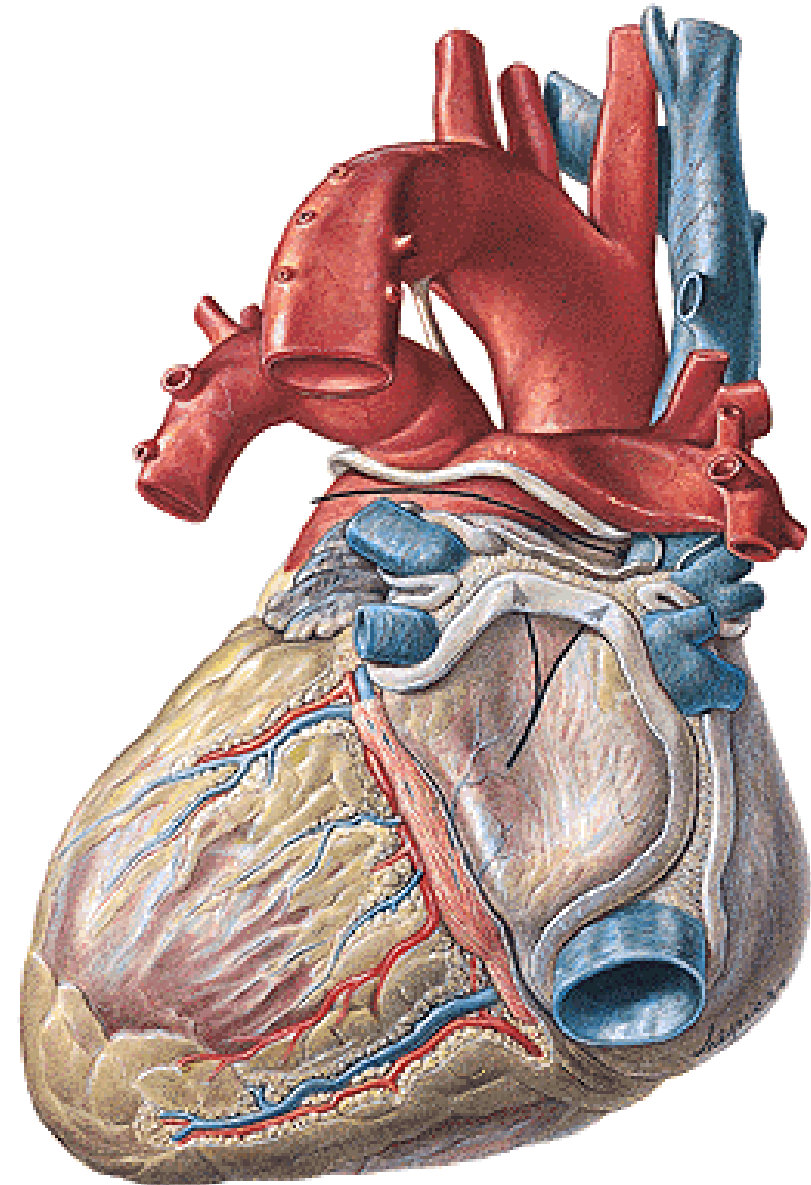
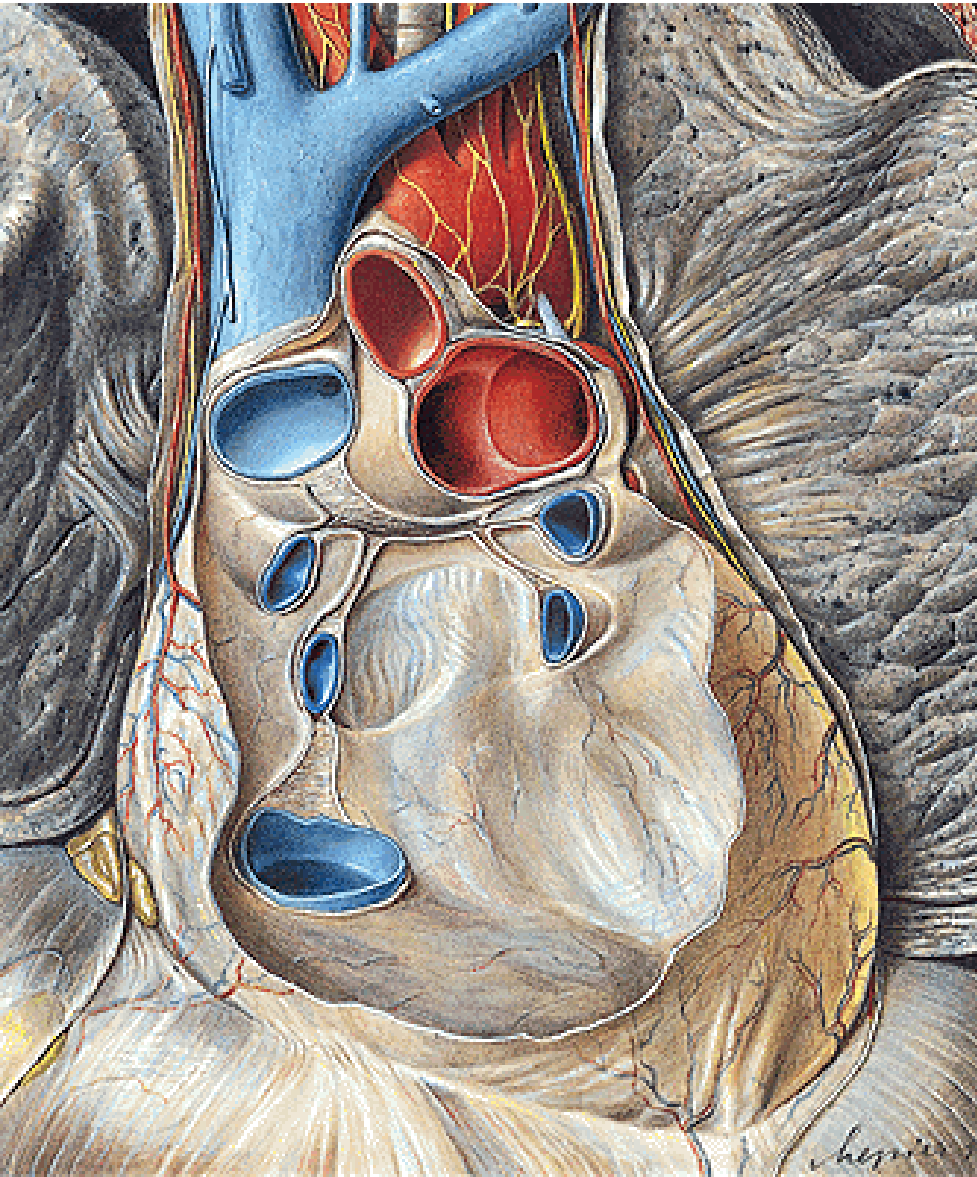
# PERICARDIUM SEROSUM

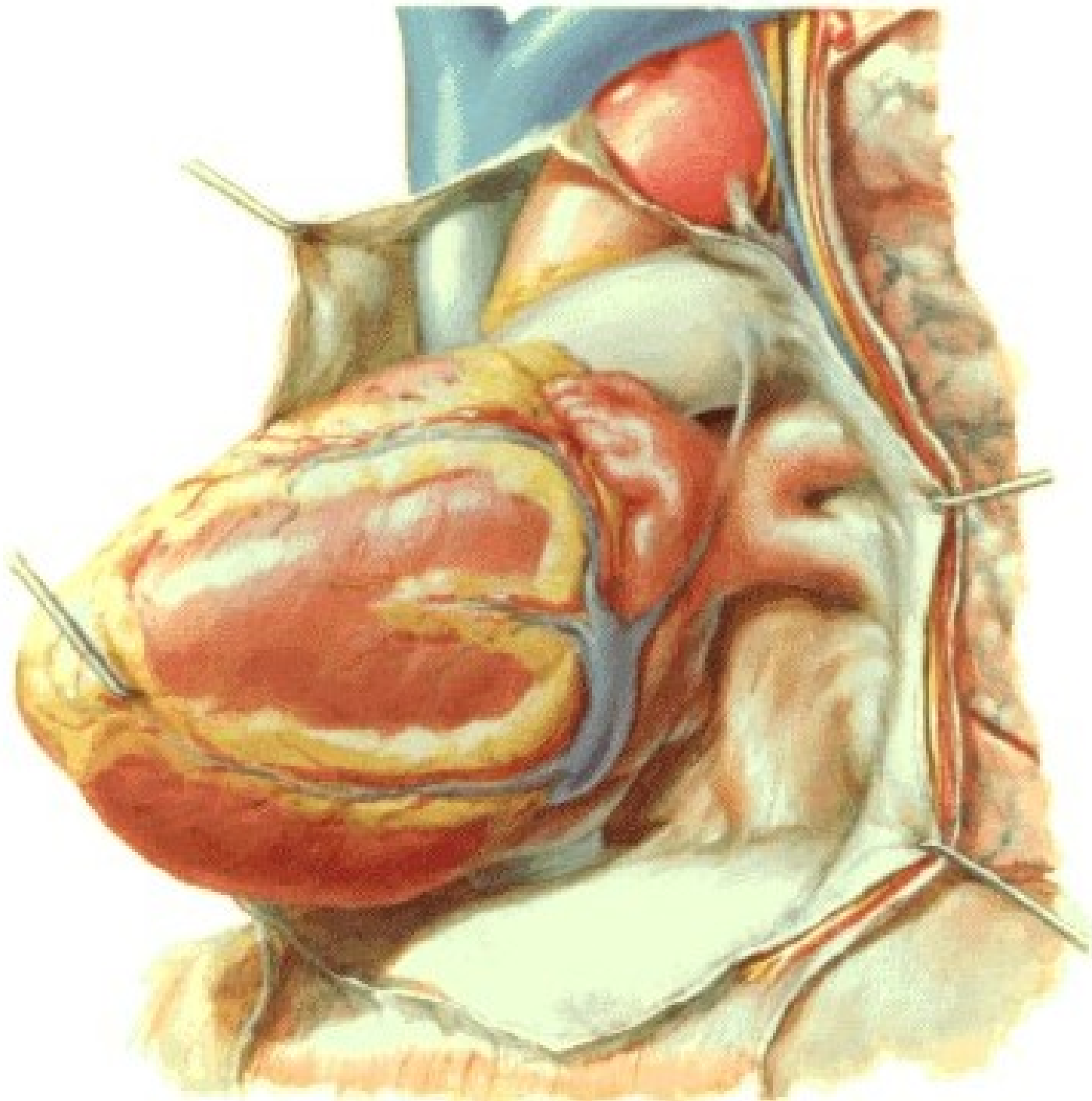
- lamina parietalis
- lamina visceralis (epicardium)
- cavum pericardii – liquor pericardii





**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**

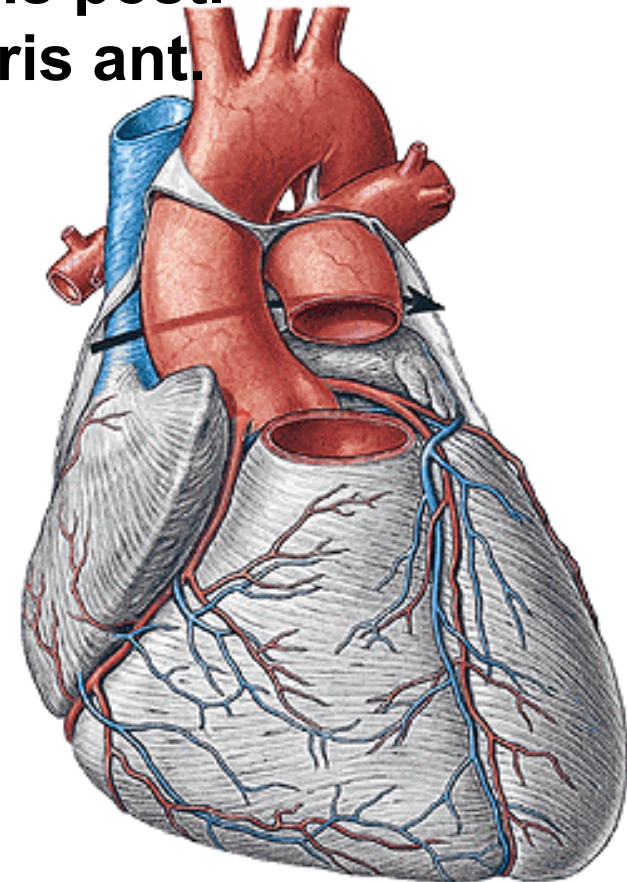
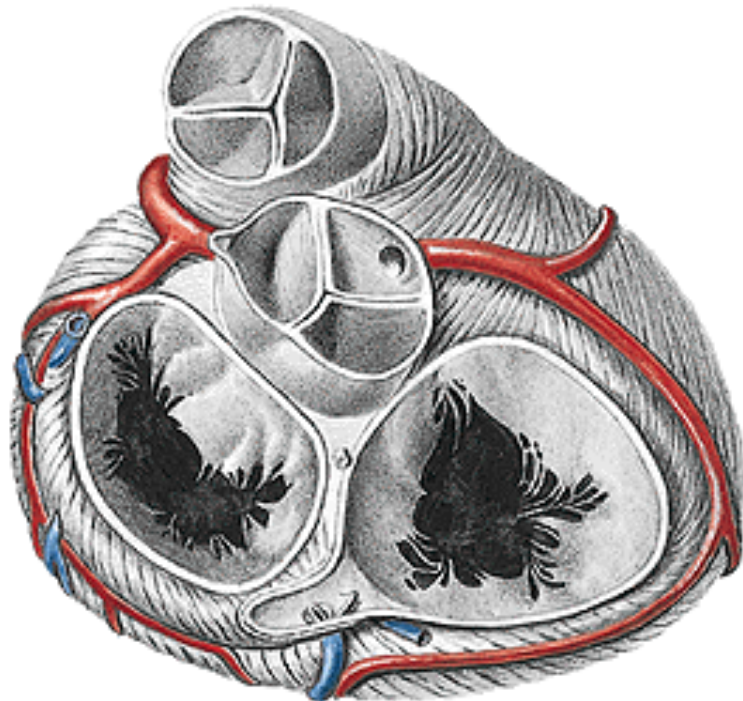
**- r. nodi sinuatrialis**

**- r. nodi atrioventricularis**

**- r. interventricularis post.**

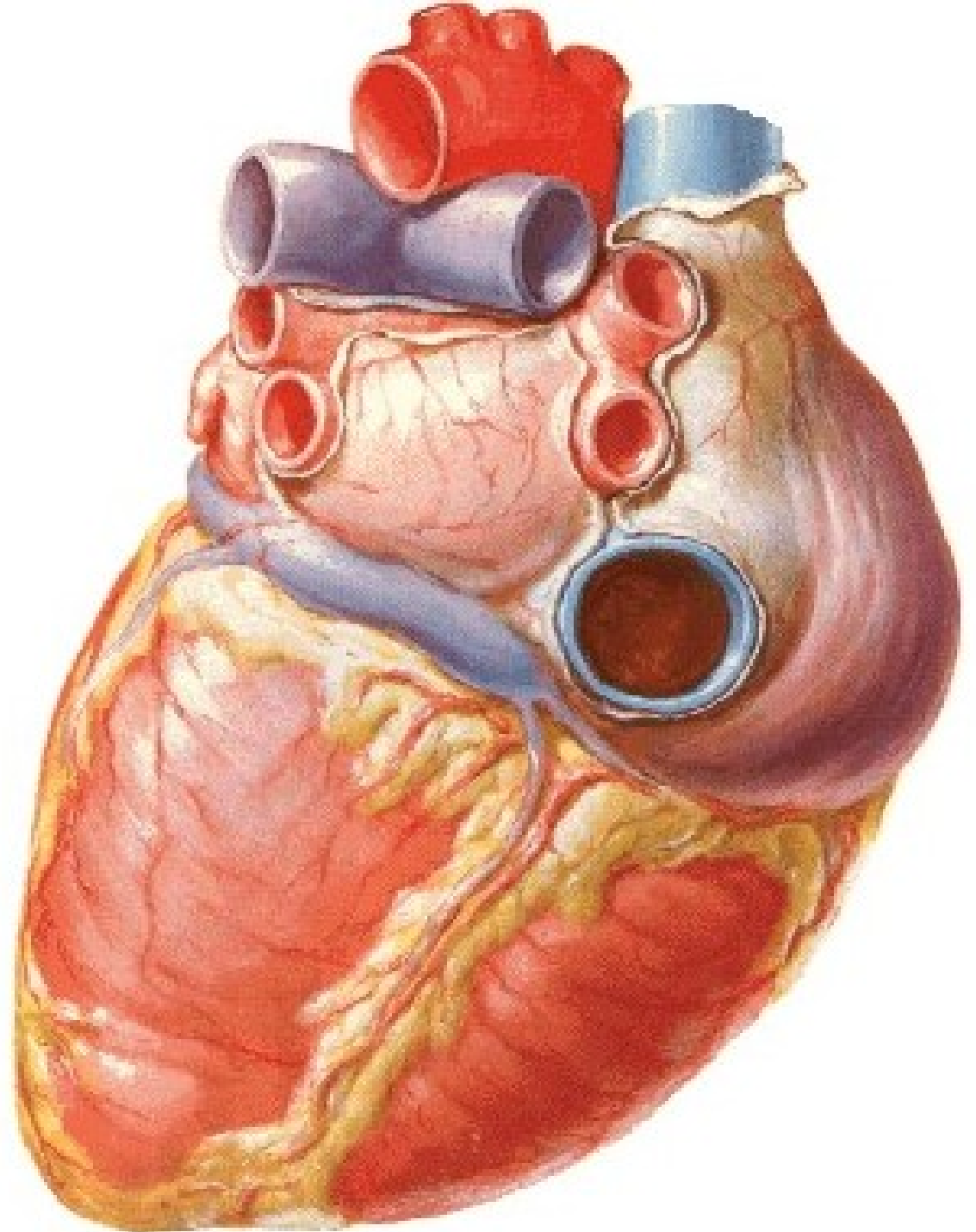
**A. coronaria cordis sin. - r. interventricularis ant.**

**- r. circumflexus**

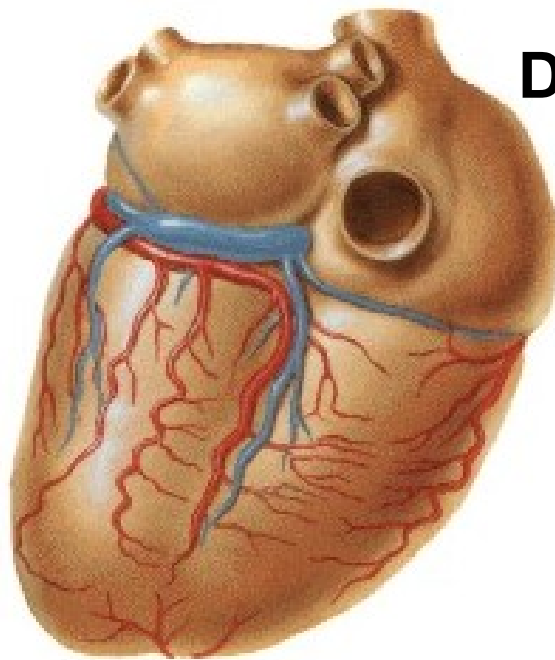
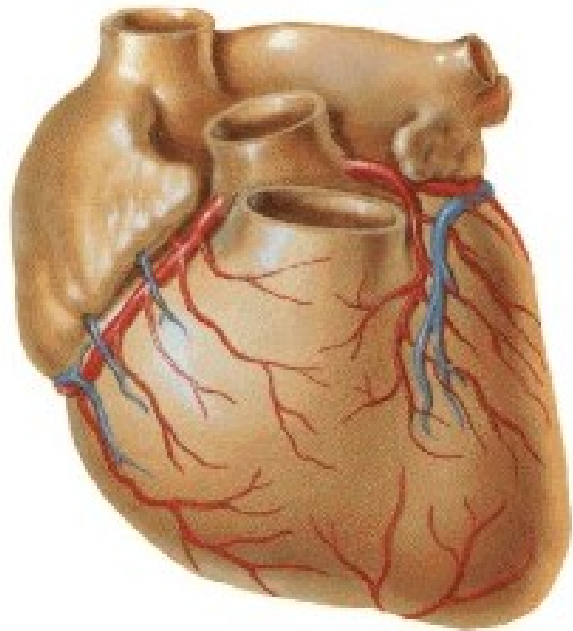


## Dominance of RCA

67%

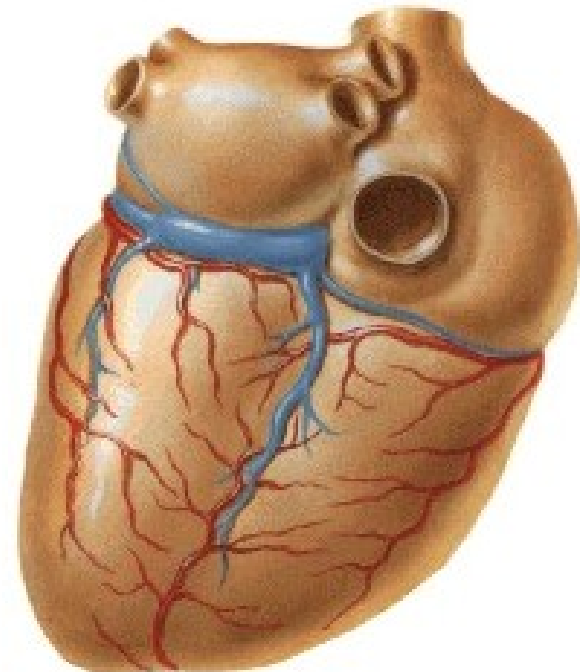
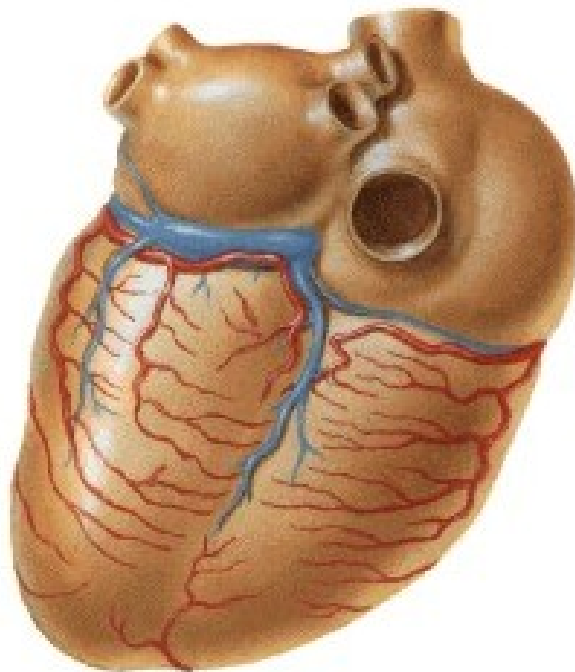






**Dominance of LCA**  
**15%**

**Codominance**  
**18%**



# **Venae cordis**

## **1. Sinus coronarius cordis**

a) v. cordis magna

b) v. cordis media

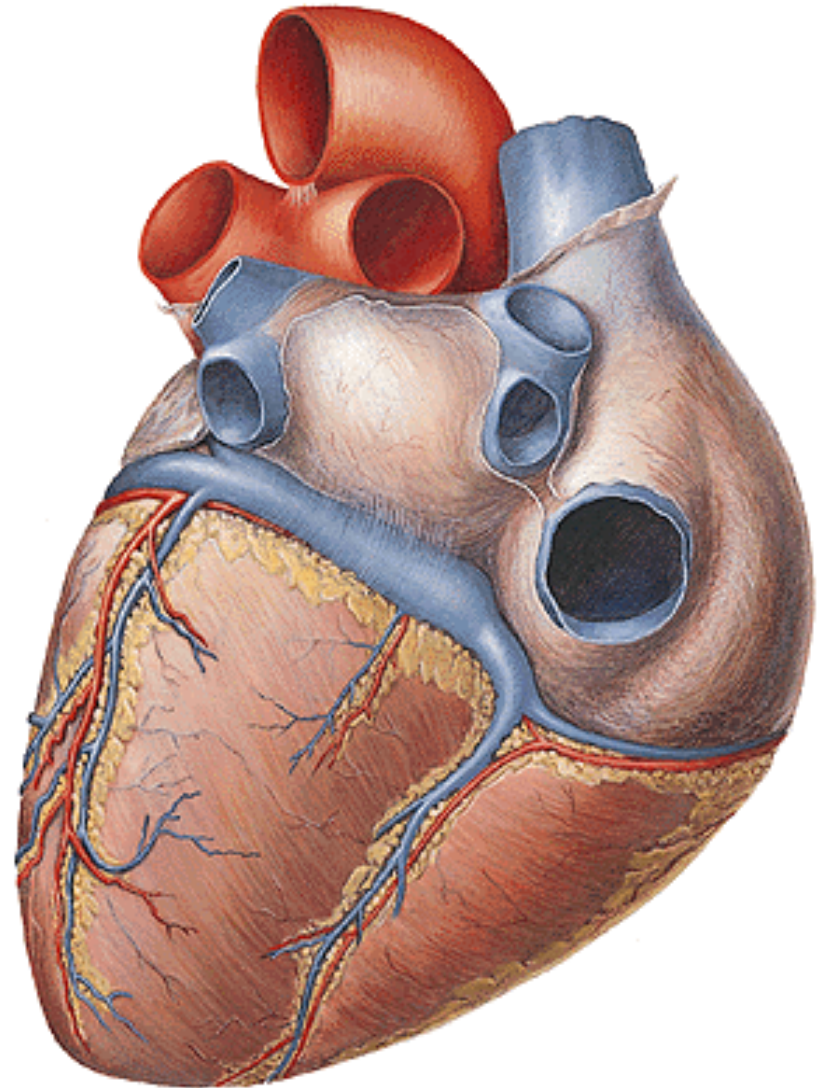
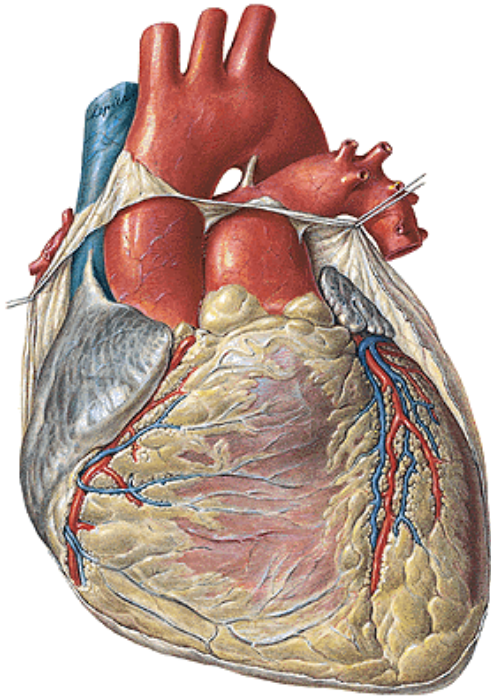
c) v. cordis parva

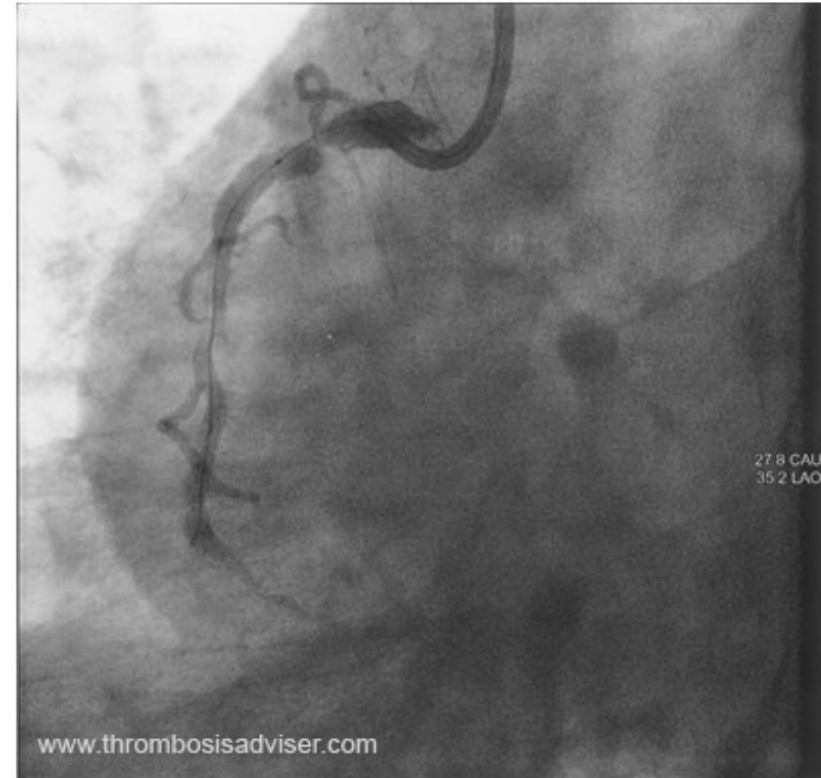
d) v. obliqua atrii sinistri

e) v. posterior ventriculi sinistri

## **2. Vv. cordis anteriores**

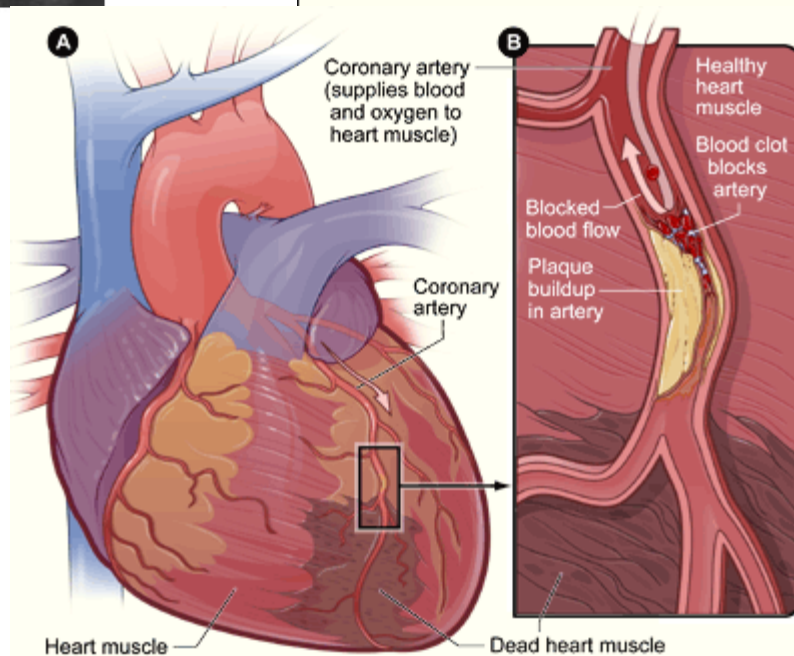
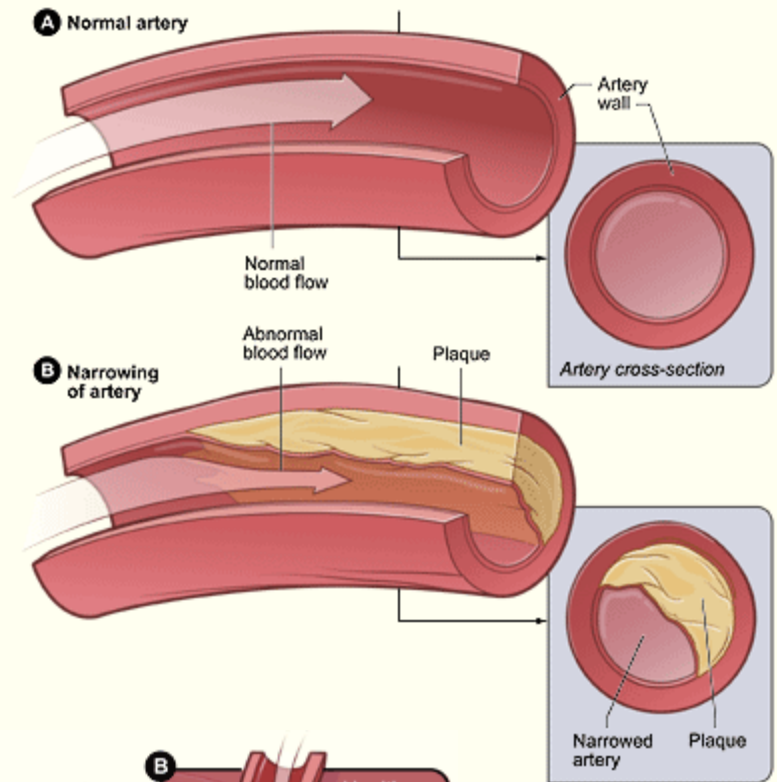
## **3. Vv. cordis minimae**





# Angina pectoris

## Myocardial infarction



## **Lymphatics:**

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

## **Nerves:**

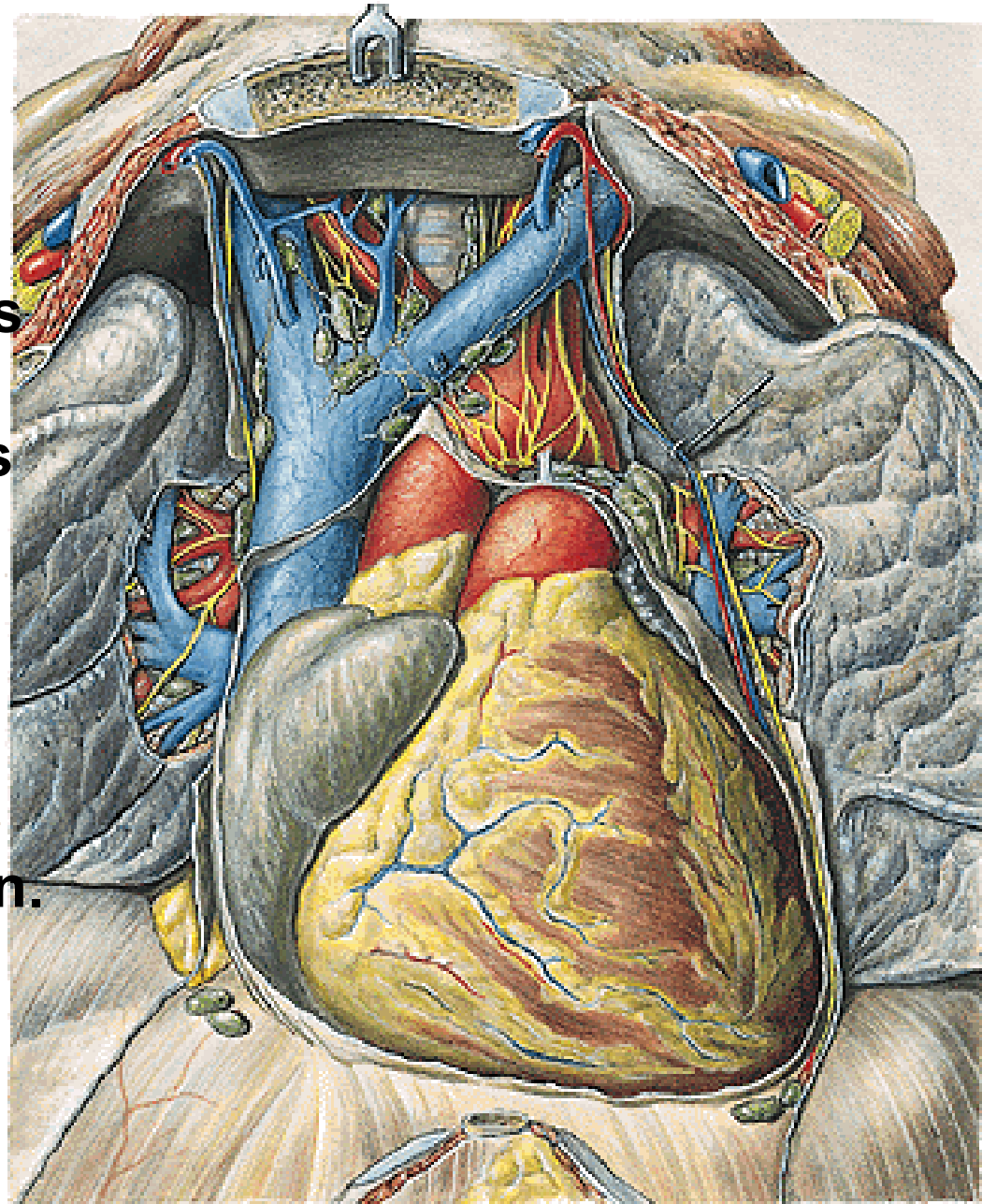
**Plexus cardiacus spf.  
(ganglion cardiacum)  
Plexus cardiacus prof.  
Plexus coronarius dx. et sin.**

**Nn. cardiaci (symp.)**

**– accelerantes**

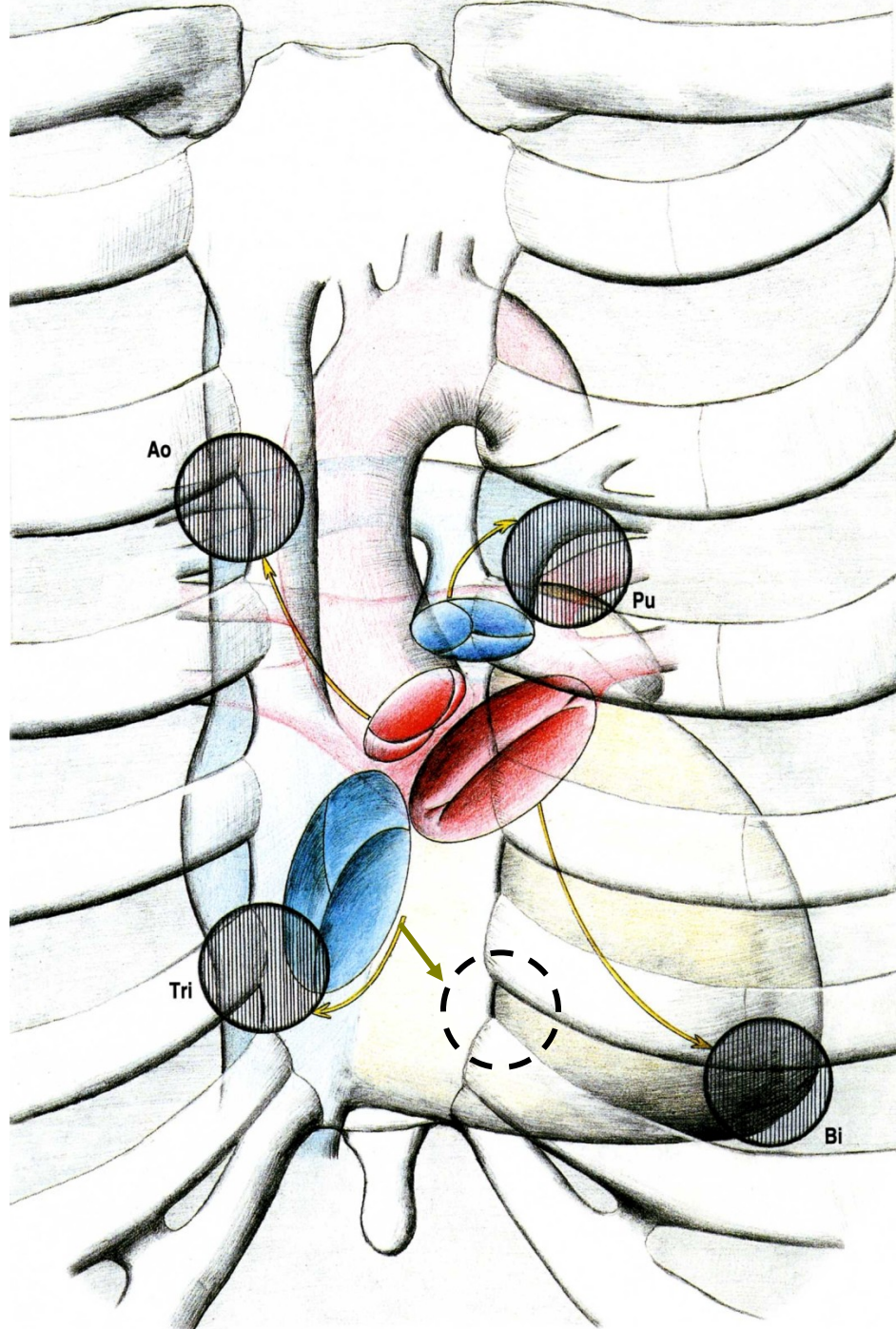
**Rr. cardiaci (parasymp.)**

**– retardantes**





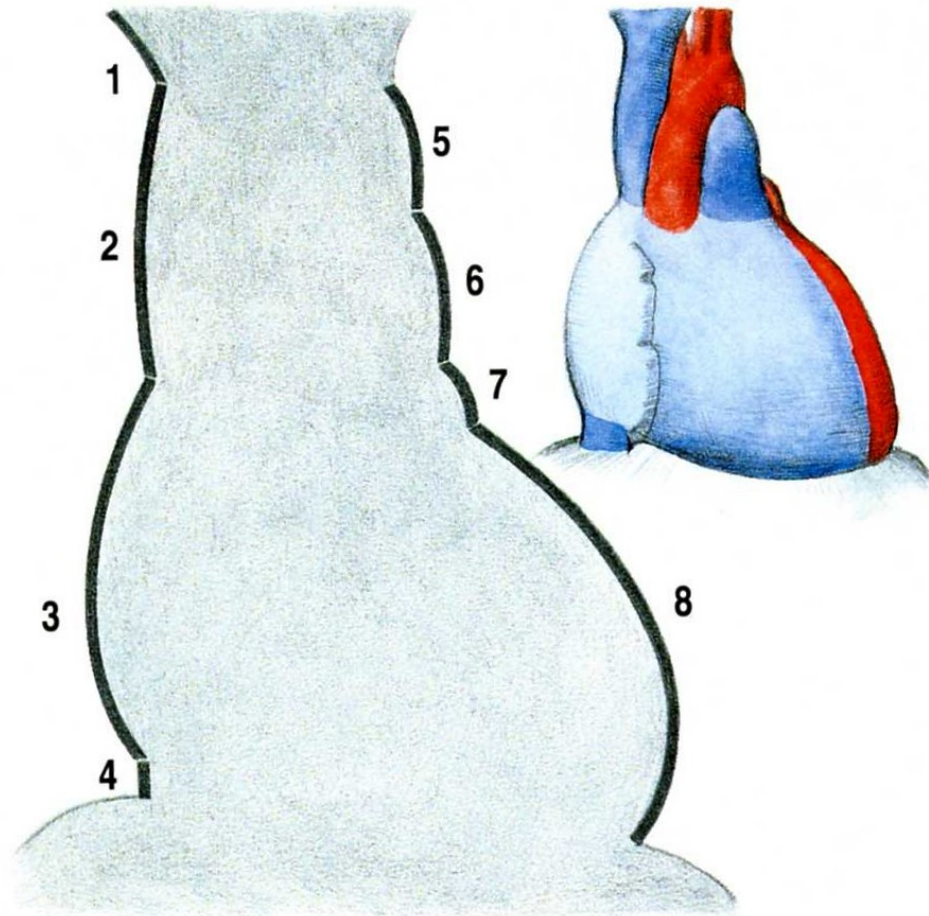
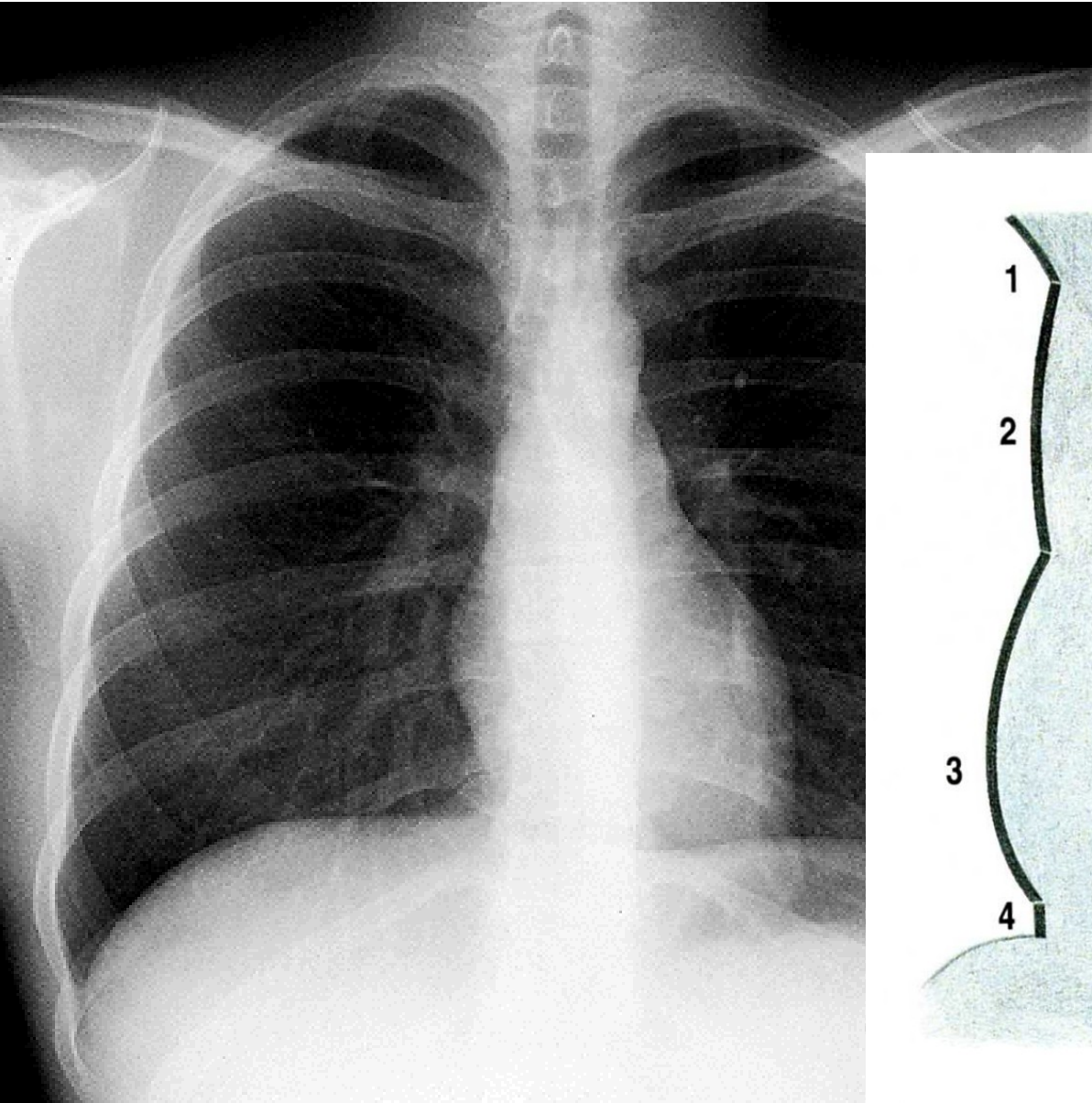
# Sites of auscultation:

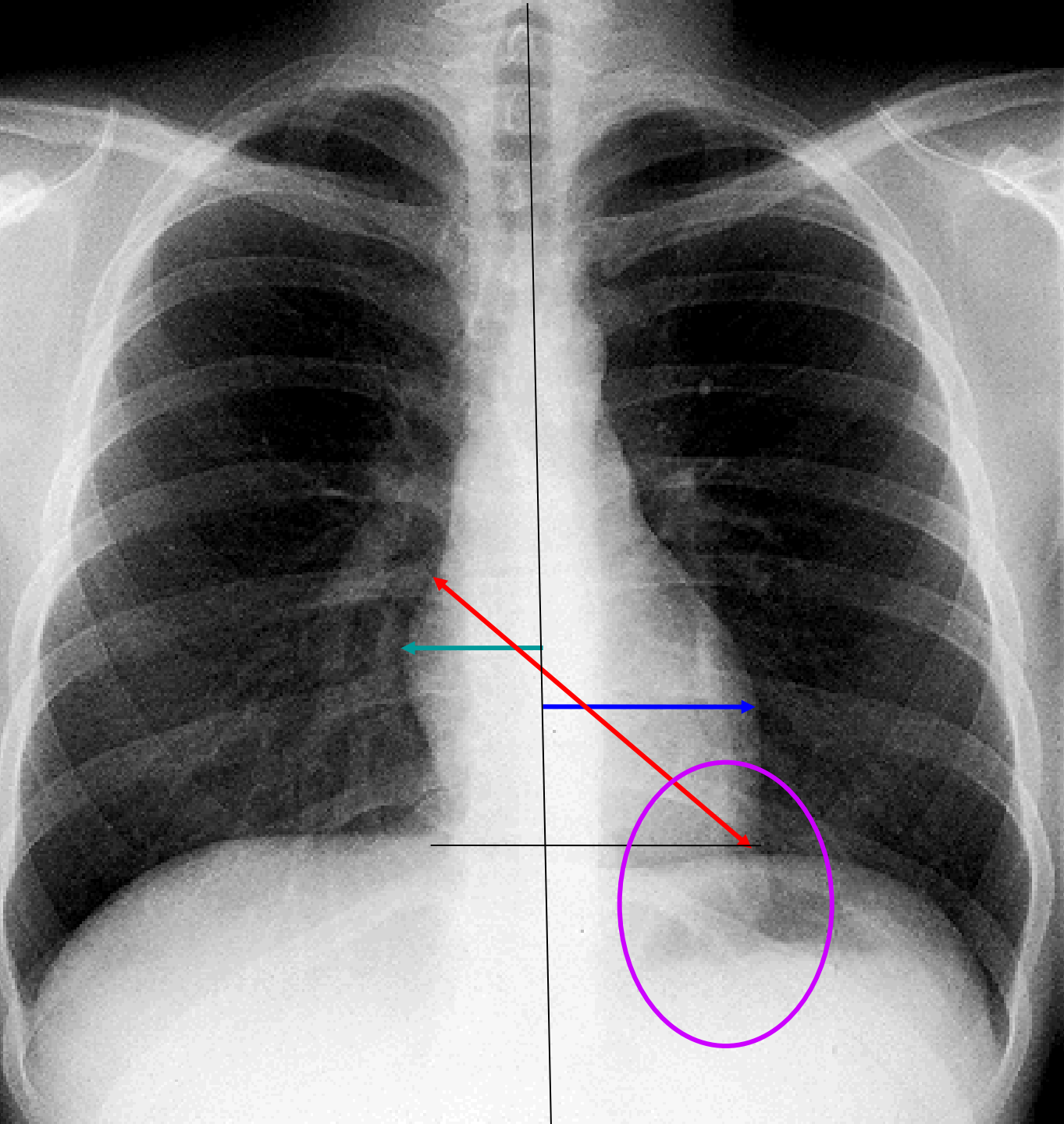


# Heart shadow:

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**

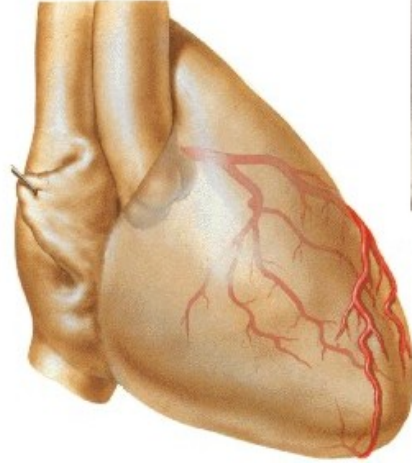
**Length**

**Gradient**

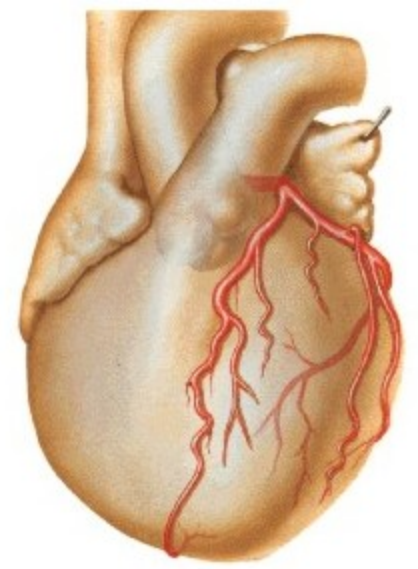
**Area**



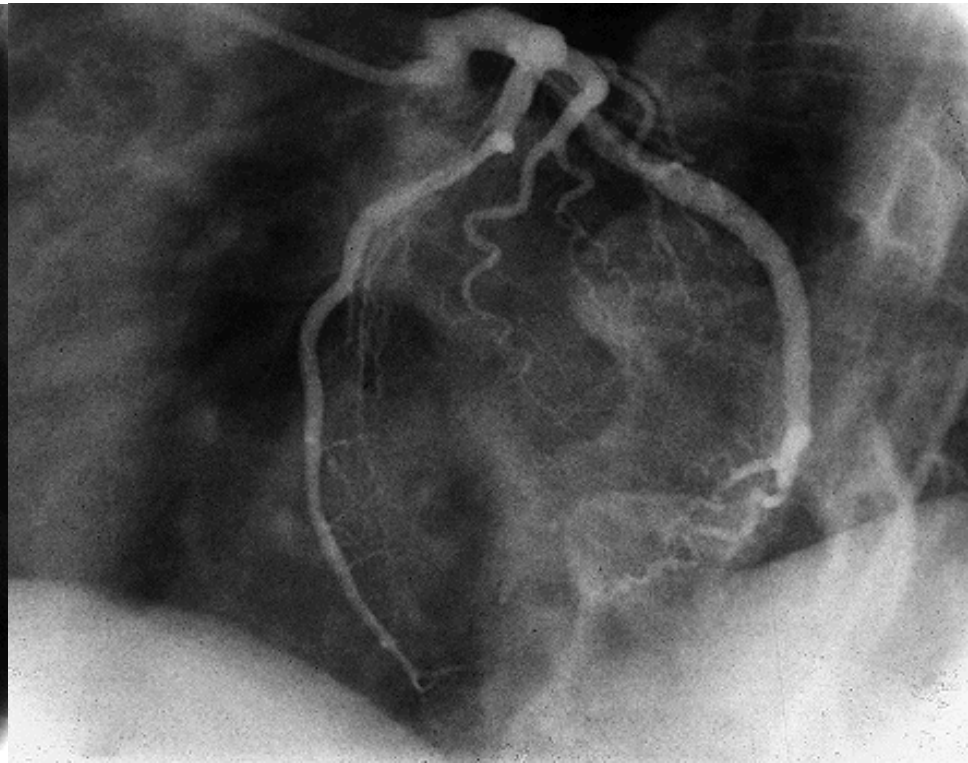
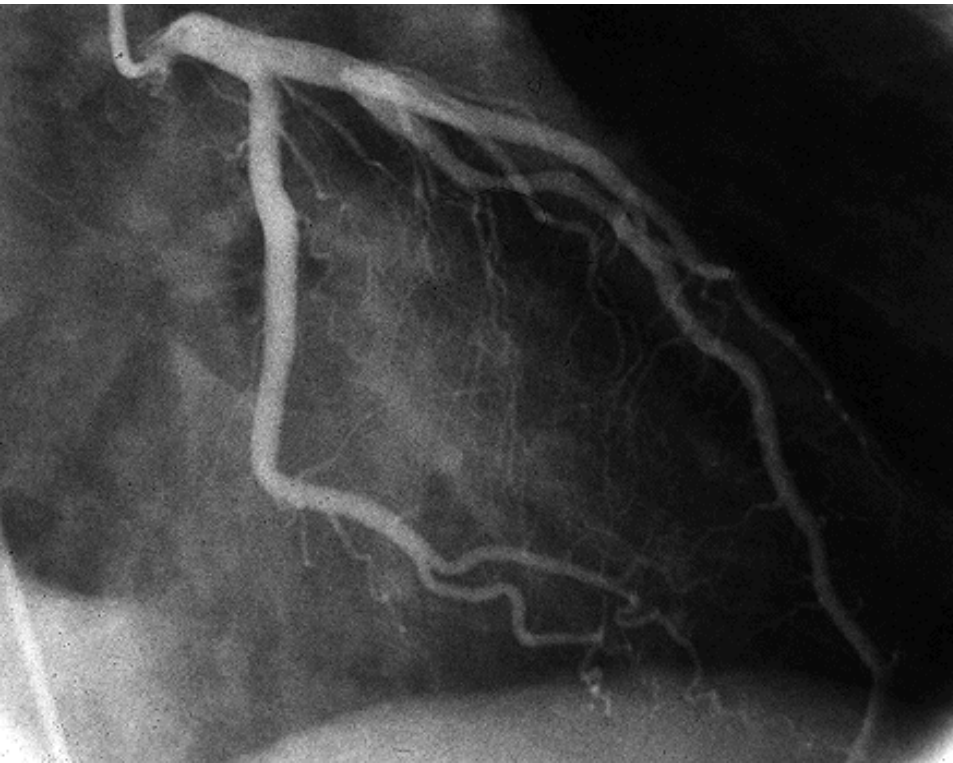
# Coronary angiography – left coronary artery



Right anterior oblique projection



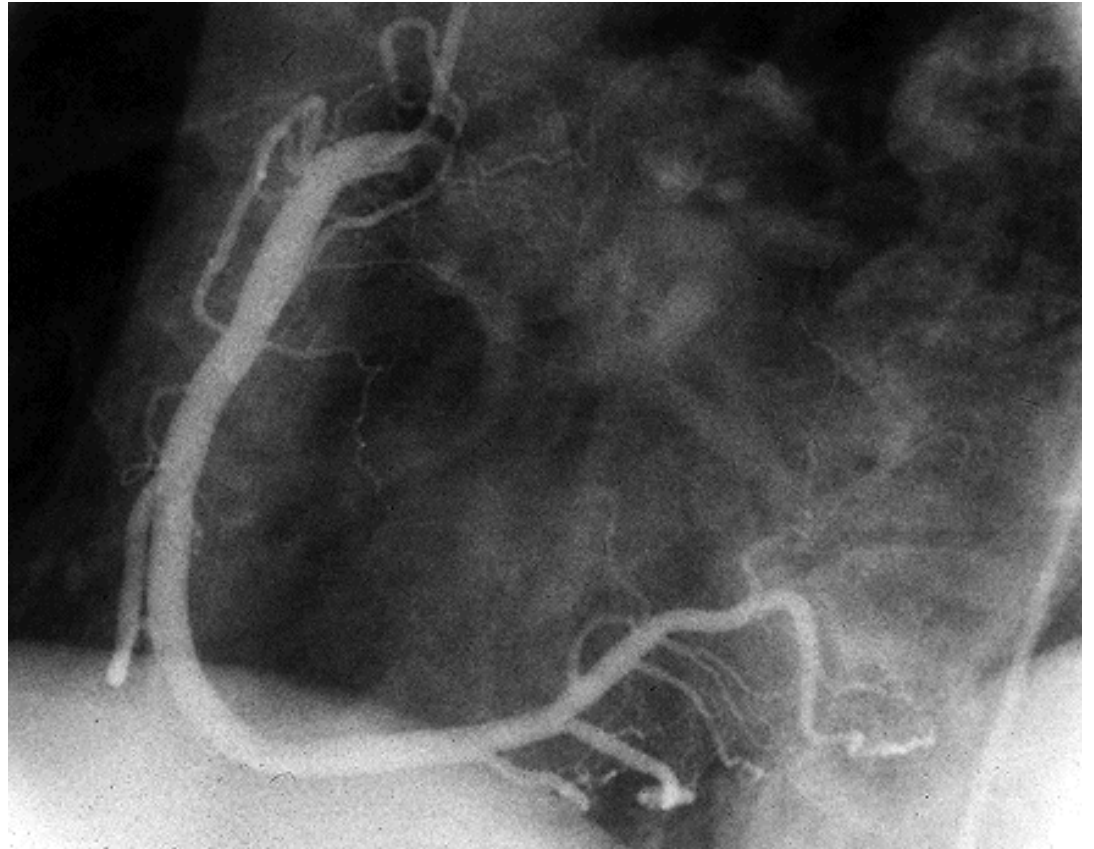
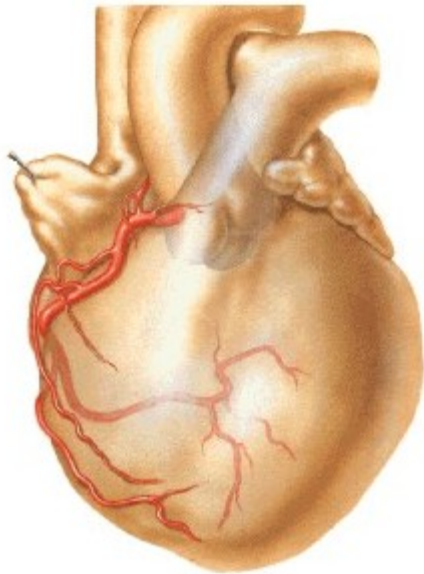
Left anterior oblique projection





# 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.**