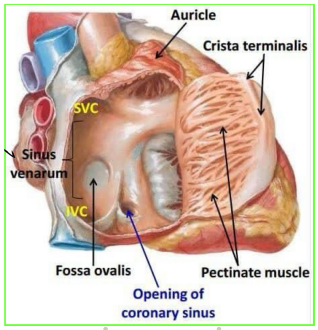
Anatomy lect 3



RA

- SVC, IVC, Coronary sinus
- Post wall → Smooth, thin, open to SVC + IVC (Poorly oxygenated)
- Ant. wall → Rough, muscular, Pectinate ms

Separated
ext. by → Sulcus terminalis
internally → Crista terminalis

opening of:-

SVC → Rt, 3rd CC. (superior post.)
IVC → Rt, 5th CC (inf. post)

تقريباً بنفس المستوى

Coronary Sinus → receiving most of cardiac veins. موقعها → Rt AV & IVC orifices بين

Inter atrial septum → has oval fossa (oval, thumbprint size depression)

there're numerous foramina of venae cordis minimae.

RV

- ant. surface :- larges part
- diaphragmatic : small part
- inf. border : تقريباً entire border composed of RV

area of inflow → thick, muscular, trabeculae carnae\ AV orifice lt 4th inter costal space.

area of outflow → Smooth wall of Conus arteriosus

Tendinous cord → free edge وطرف حر of the ant, post, Septal cusps

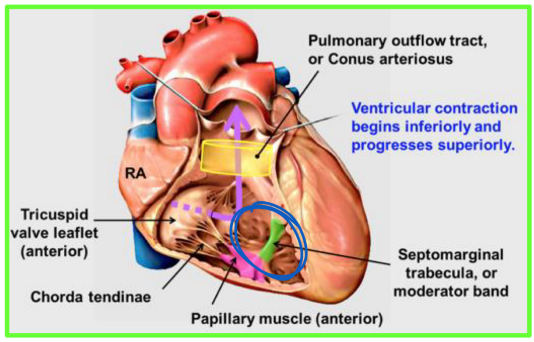
طريقة حت

Papillary ms :- 3 papillary ms

① ant papillary ms → largest, ant wall

② Post papillary ms → Smaller, inf wall

③ Septa papillary ms → IV Septum, it tendinos cords attach to ant & septal cusps of tricuspid valve.



① muscular, ② membranous parts, Strong, oblique, between Rt & LT Ventricles

سُمكه متغيّر او ثلاثة أضعاف اكبرهن سمك جدار ال RV

thick bcz of ↑ BP in LV (majority of septum)

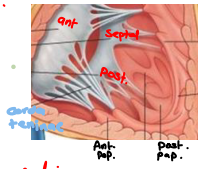
Septomarginal trabecula (moderator band) → muscular bundle form inf IVS to base of ant. papillary muscle.

↳ carry part of Rt branch of AV bundle a part of Conducting System to → Ant papillary ms

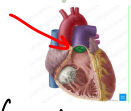
Valves

Tricuspid valve

- Close Rt AV orifice during Contraction
- 3 cusps:- ant & septal & post.
- attach to fibrous ring on orifice
- free margin → attach to Chordae tendineae



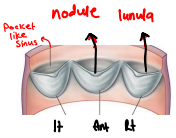
Semi Lunar



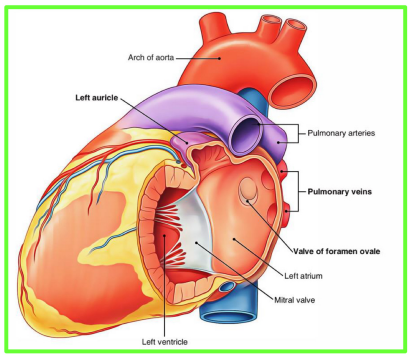
* on apex of infundibulum

* Consists of :- Lt / Rt / ant. Semilunar

* margin of cusp → lunula.
  thickened portion → nodule



LA



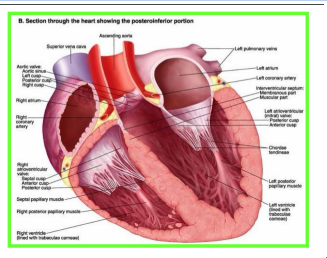
ant ⟶ Smooth

lt auricle ⟶ possesses muscular ridge

Openings :- 4 Pulmonary veins (2 from each lung) posteriorly

- No valves in pulmonary veins.
- mitral valve gurdes the lt AV orifice.

LV



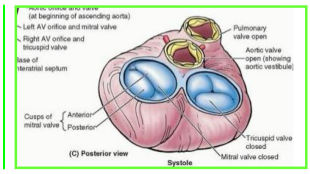
- has larger Ant + Post Papillary ms
- wall : Smooth, non muscular, outflow part "Superoanterior"
- Aortic vestibule ⟶ lead to Aortic orifice + aortic valve

ascending part of aorta

lies in Rt posterosuperior part

Valves

Mitral (double leaflet)



* opposite lt 4th Stero Costal junction level
* Gurds Lt AV orifice
* Consists of 2 cusps { ant, post }

ant → larger, between AV & aortic orifice

محاضرة أبو الحاجي بيحكي عنها

Aortic

* Post. of lt side of sternum 3rd intercostal space:
* gurds aortic orifice
* Rt cusp → ant wall
* lt post → post wall

خلف كل cusp يوجد:-
aortic Sinus (wall bulge)

* ant Aortic Sinus → origin of Rt CA
* Lt post Sinus → origin of lt CA

Cardiac Skeleton

: Collection of dense, fibrous CT يشكل 4 Rings & interconnecting areas in plane () Atria & ventricles

opening of pulmonary trunk / aortic orifice / 2 AV orifices → بحيط

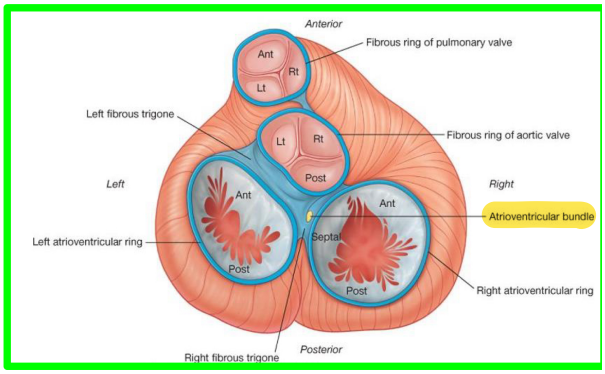
Annulus fibrosus ← بسمّيه

يمرق منه ↓

AV bundle

⇓

Single connection between the 2 groups of myocardium



Defects

Atrial septal :- ASD

A congenital anomaly of the interatrial septum, usually incomplete closure of the oval foramen, is an atrial septal defect (ASD).

The small openings, by themselves, cause no hemodynamic abnormalities and are, therefore, of no clinical significance and should not be considered forms of ASDs.

Ventricular Septal :- VSD

Membranous part is the common site of ventricular septal defects (VSDs), although defects also occur in the muscular part

❖VSDs rank first on all lists of cardiac defects. Isolated VSDs account for approximately 25% of all forms of congenital heart disease.

❖ A VSD causes a left to right shunt of blood through the defect. A large shunt increases pulmonary blood flow, which causes severe pulmonary disease (hypertension, or increased blood pressure) and may cause cardiac failure.