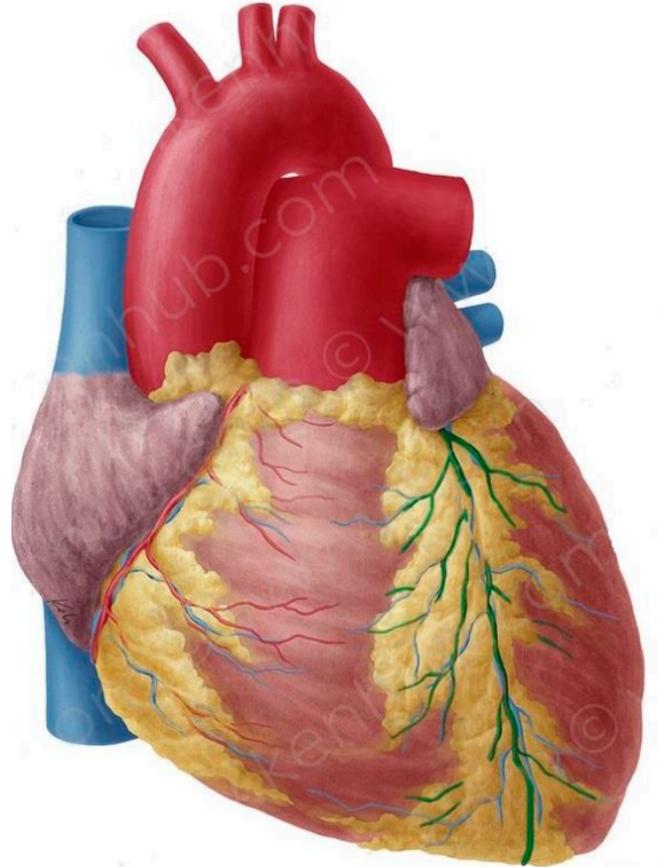


EXTERNAL FEATURES OF THE HEART

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القلب هو هرم رباعي الاضلاع



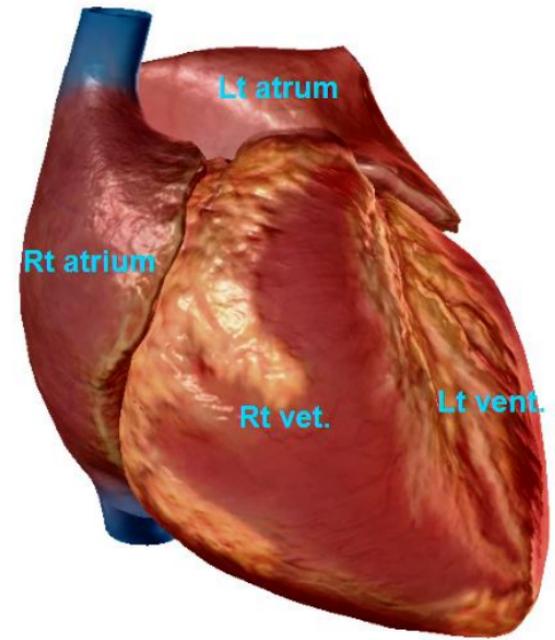
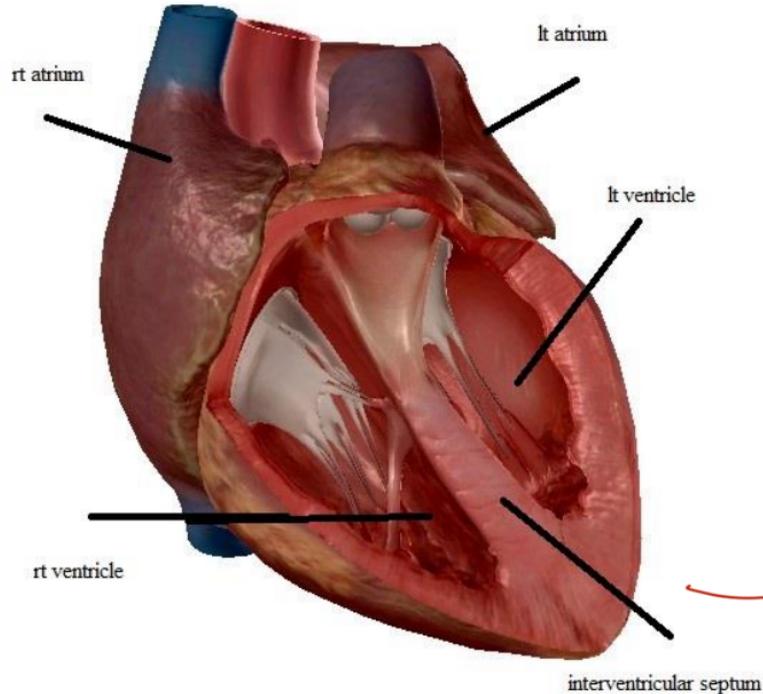
DEFINITION

عضو مجوف مخروطي الشكل = مكون من الأضلاع على شكل سلكي بالدم

conical hollow organ consists of

2 atria separated by interatrial septum &

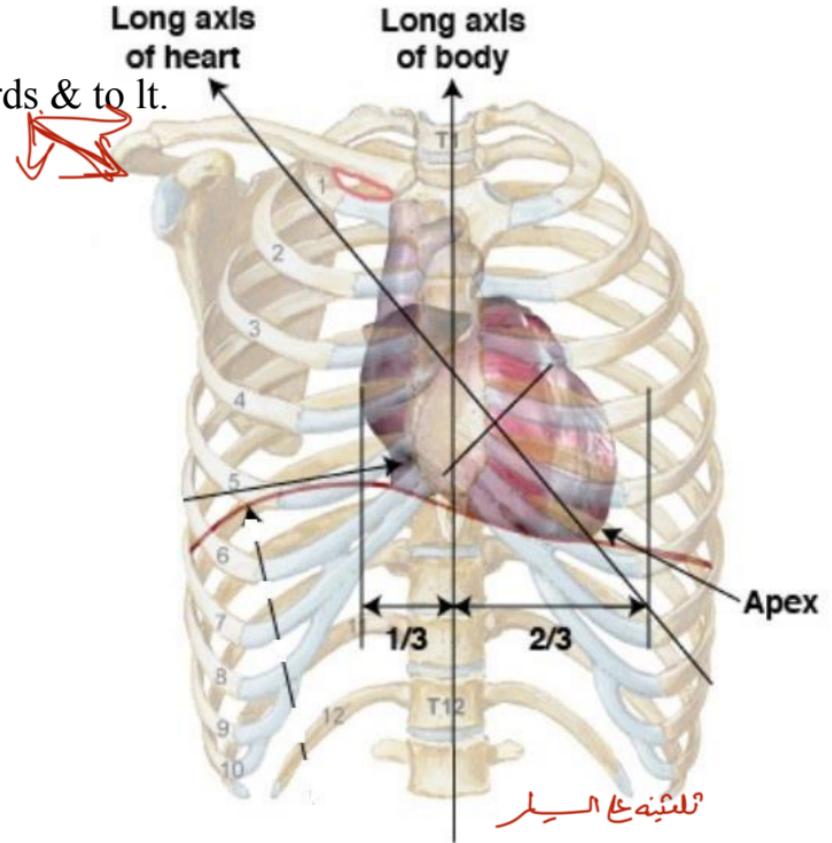
2 ventricles separated by interventricular septum



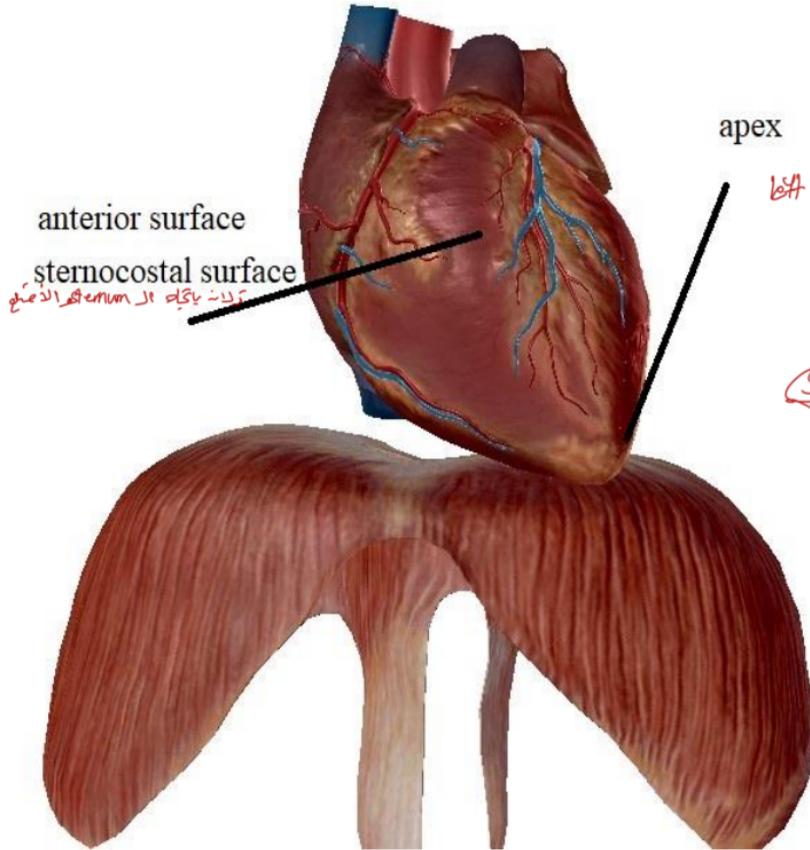
POSITION

in middle mediastinum

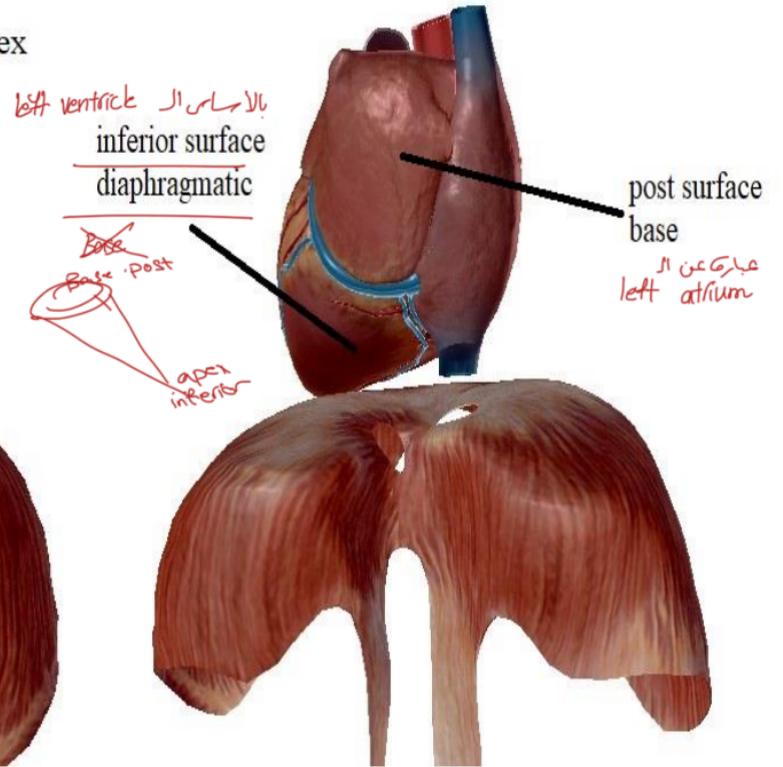
- 1- its long axis directed downwards forwards & to lt.
- 2 - 1/3 of heart lies on Rt side & 2/3 on Lt side of median plane



SHAPE OF THE HEART



→ 5 surfaces of the heart
→ Rt surface
→ Lt surface



GROOVES OF THE HEART

حاجه طول القلب

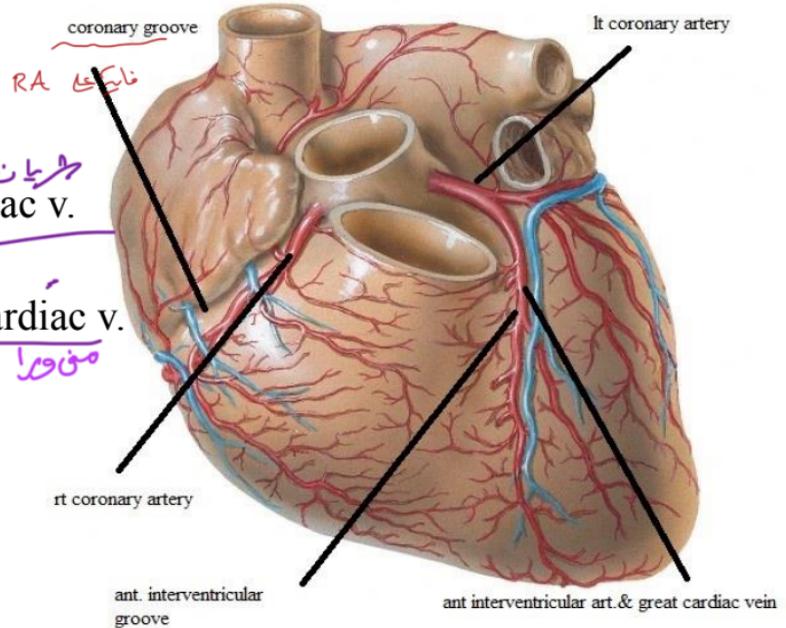
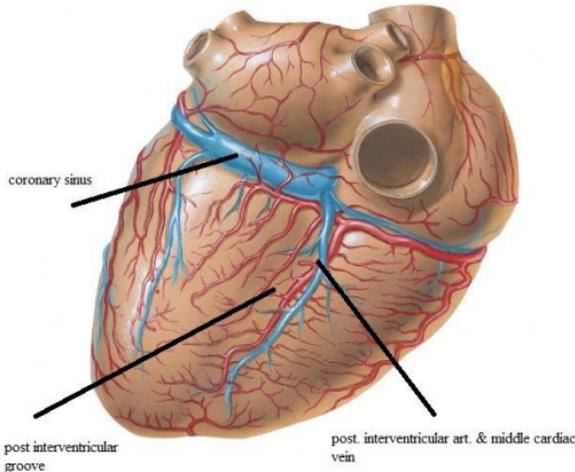
1- **Coronary (atrioventricular)** *كل ما هو مربوط بالقلب*
 contains coronary arteries & coronary sinus *الدم الغني بالأكسجين*

2- **Ant. interventricular groove** *خط يفصل بين الفئتين الأماميتين*
 contains ant interventricular art. & great cardiac v.

3- **Post interventricular groove** *خط يفصل بين الفئتين الخلفيتين*
 contains post interventricular art. & middle cardiac v.

مفصولا متوازيين

ورا



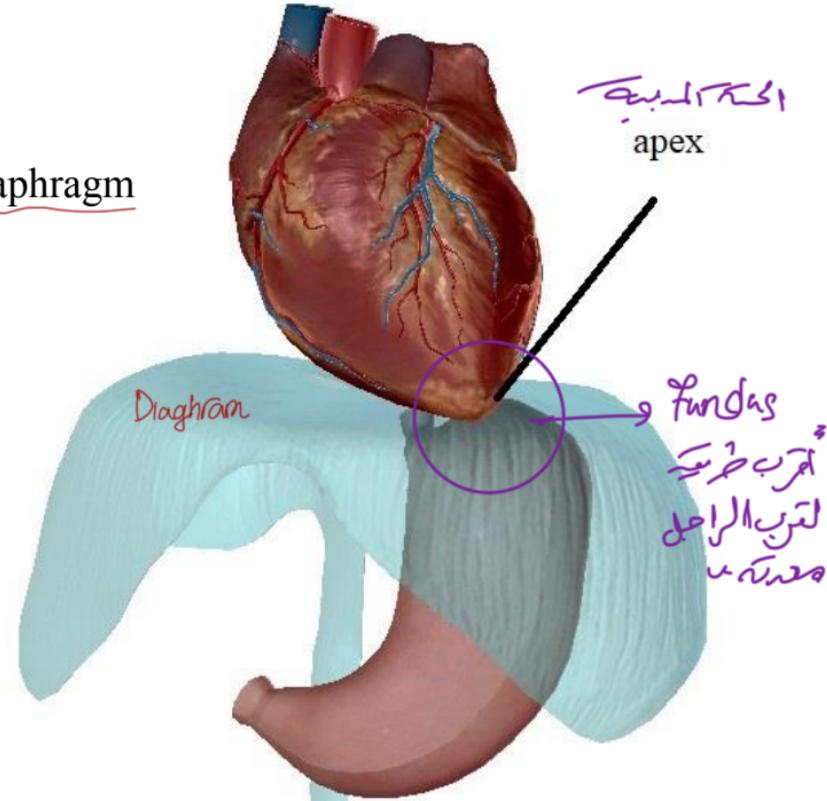
SURFACES OF THE HEART

Apex :

Formed by: - Lt Ventricle.

Directed: - downward forward & to Lt.

Relation: - separated from fundus of the stomach by pericardium & diaphragm



SURFACES OF THE HEART

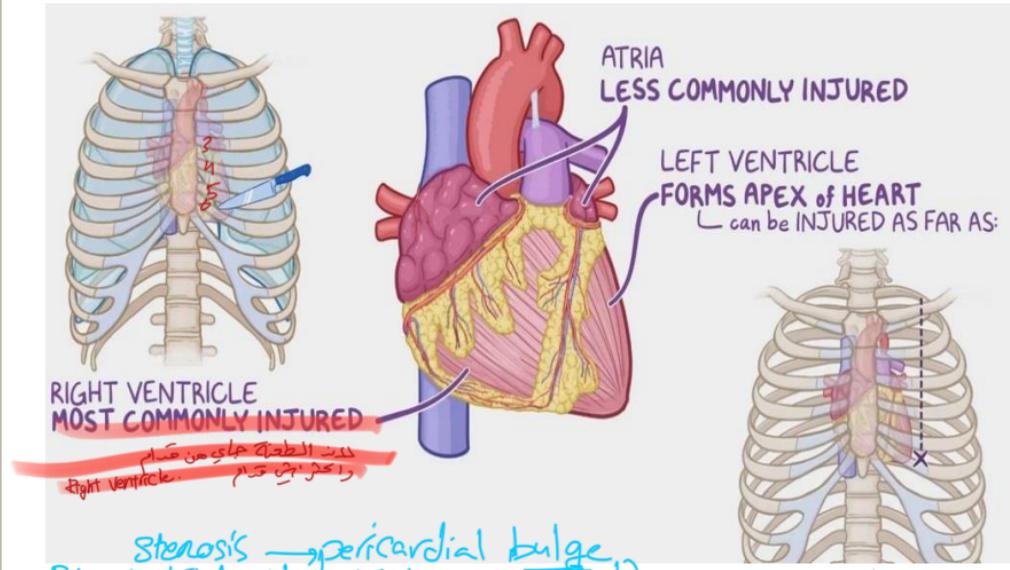
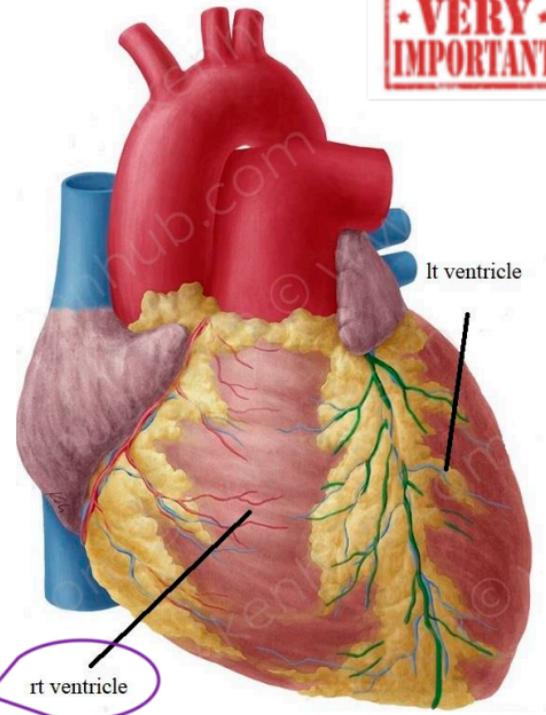
Anterior (sternocostal) surface:

Formed by

- 1- Rt ventricle mainly
- 2- Lt ventricle partially

Relations: - lies behind the sternum & rt & lt c c 3-6

**• VERY •
IMPORTANT**



rt ventricle
السترا
more vulnerable
stab wound

stenosis → pericardial bulge
Rt ventricle Hypertrophy (congenital)

— استرواحات

SURFACES OF THE HEART

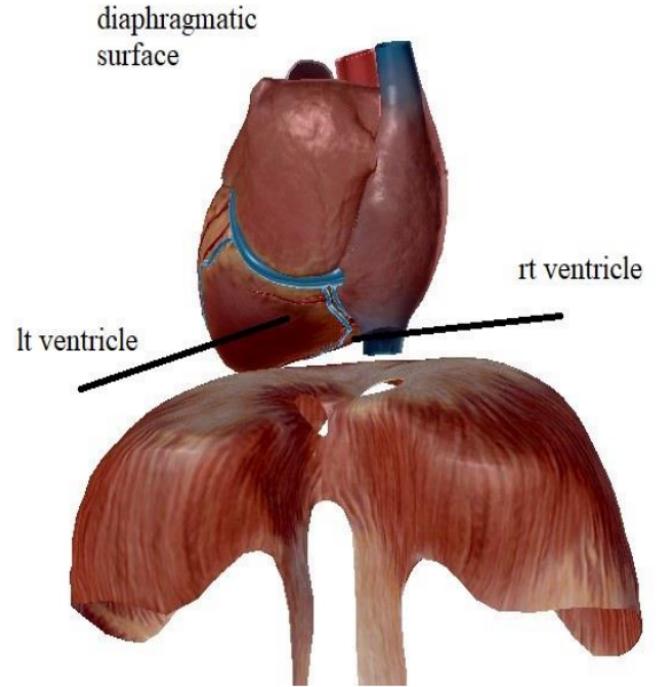
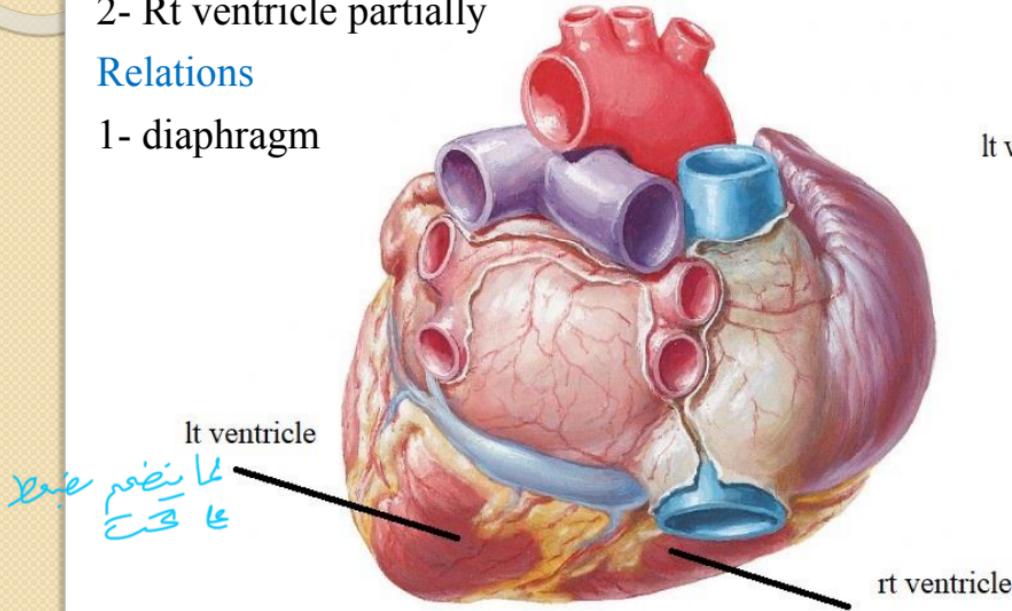
Inferior (diaphragmatic) surface:

Formed by:

- 1- Lt ventricle mainly
- 2- Rt ventricle partially

Relations

- 1- diaphragm



SURFACES OF THE HEART

Post. Surface (base):

Formed by:

- 1-lt. atrium (mainly)
- 2- rt. Atrium partially

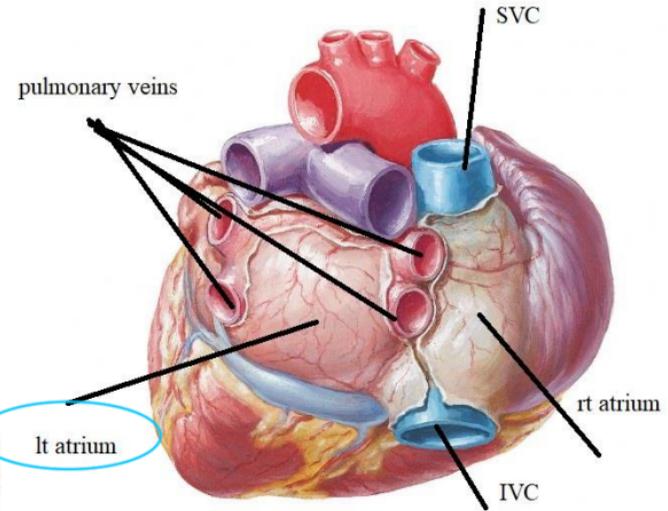
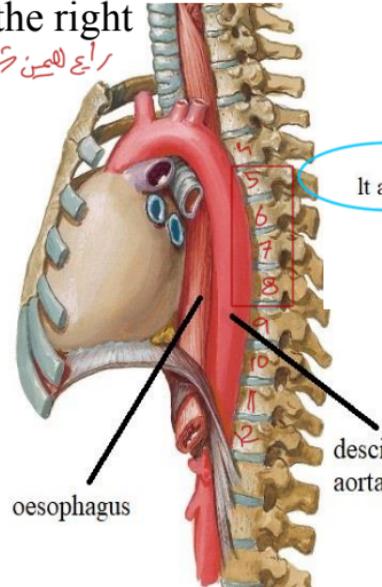
Directed: - backwards slightly to the right

Relations:

- 1-middle 4 thoracic vertebrae
- 2-separated from them by descending aorta, oesophagus, & oblique sinus of pericardium

apex ١١*
left ١٢
post surface ١٣
right ١٤

رابع للمين فوقه



lt atrium

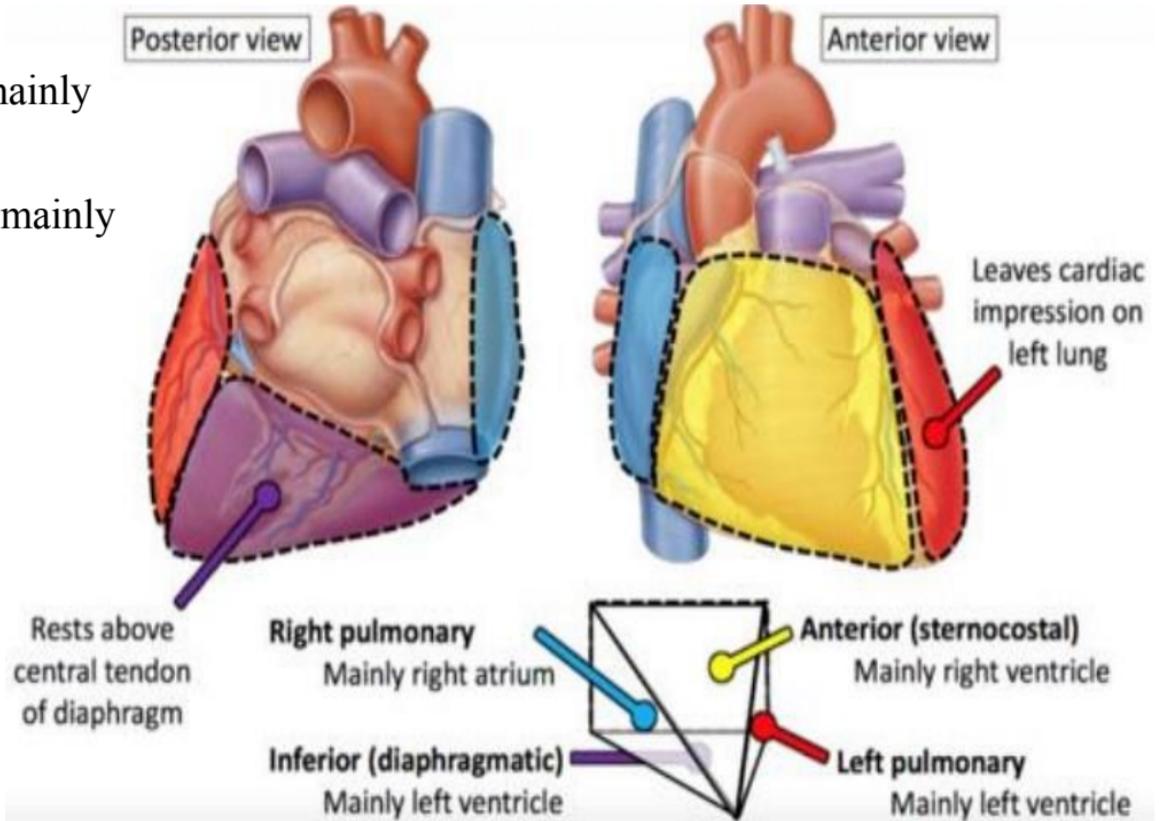
SURFACES OF THE HEART

Rt. Surface:

Formed by: rt. atrium mainly

Lt. Surface:

Formed by: lt. ventricle mainly



BORDERS OF THE HEART

Borders of the heart : all ^{معبر}convex and ill-defined except inferior (sharp)

1-Rt. border:

formed by Rt atrium. Extends from opening of SVC to opening of IVC

2-Inferior border: ^{الزقتين التي تحرك}

formed by: 2 ventricles (mainly the rt)

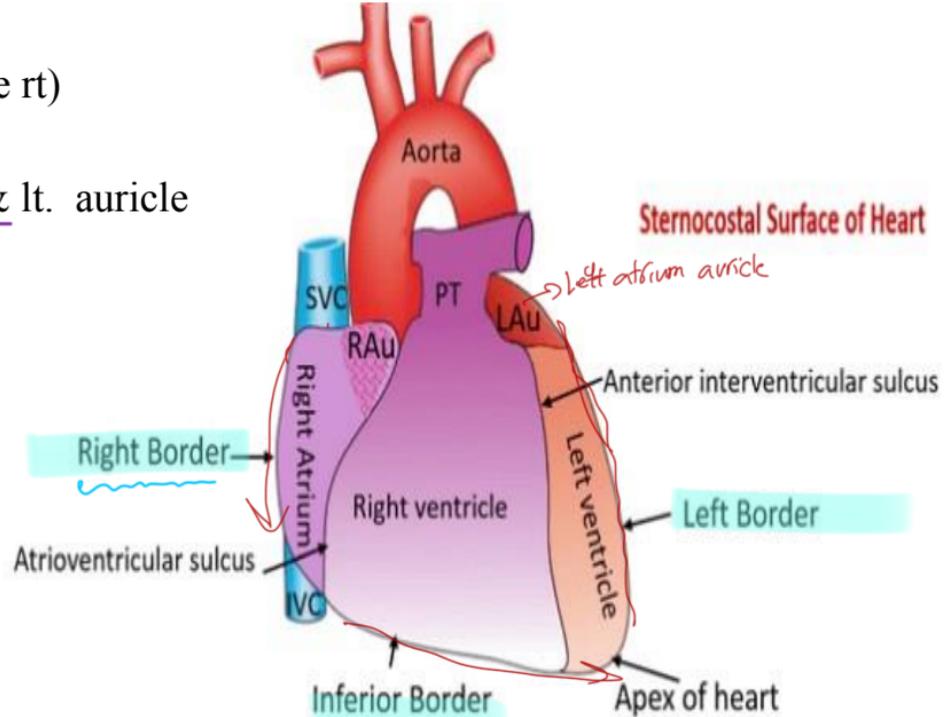
3-Lt. border:

formed by: Lt Ventricle (mainly) & Lt. auricle

4-Superior border: ^{عزقتين التي قومت}

2 atria (mainly the lt)

hidden by great vessels of the heart



حطلي هوركا عن
عزقتين التي قومت

SURFACE ANATOMY OF HEART

★ VERY ★
IMPORTANT

represented by the following points

Point 1: at lower border of Lt. 2nd c.c. 1.5 cm from the sternum

Point 2: at upper border of Rt. 3rd c.c. 1 cm from the sternum

Point 3: at Rt. 6th c.c. 1 cm from the sternum

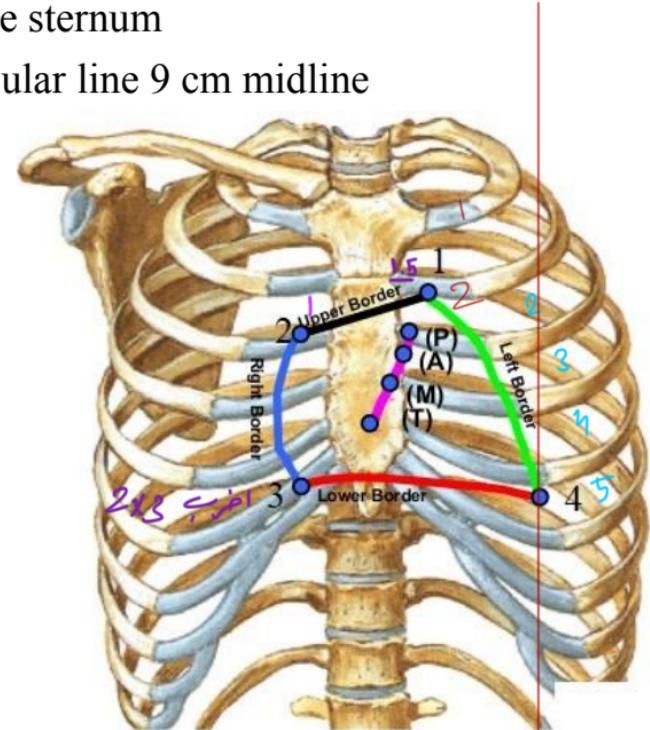
Point 4 (apex): Lt. 5th intercostal space in midclavicular line 9 cm midline sternocostal surface

Upper border: convex upward () point 1, 2

Rt. border: convex to Rt () point 2, 3

Lower border: concave downward () point 3, 4

Lt border: convex to Lt () point 4, 1



أعلى نقطة بالسارح

3

أضربهم

أضربهم

كلام صعب عرا
هذا صعب

SURFACE ANATOMY OF HEART

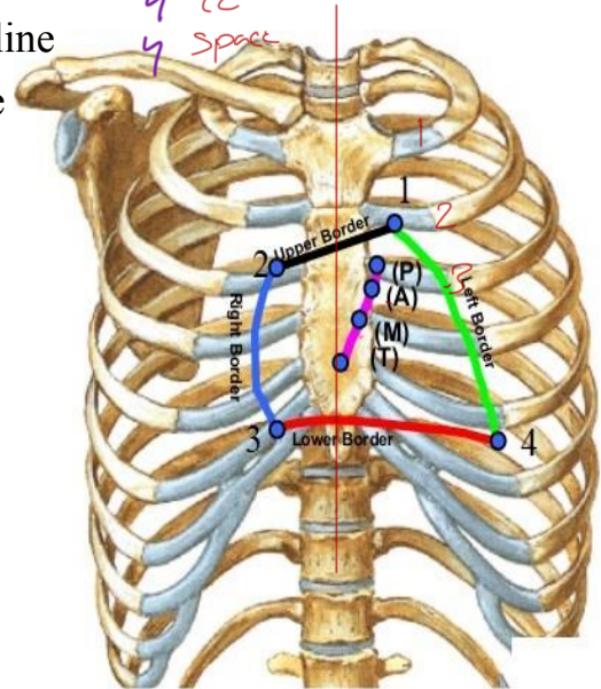
pitra 3 cc
 آدم 3 space
 من الضلعة 4 cc
 4

cardiac valves :

- ④ الرئوي Pulmonary: opposite Lt 3rd c.c. close to margin of the sternum
- ④ الأبهر Aortic: opposite Lt 3rd space close to margin of the sternum
- ④ ثنائي الشرف Mitral: opposite Lt 4th c.c. on Lt. 1/2 of sternum
- ④ ثلاثي الشرف Tricuspid: opposite 4th space close to rt side of midline

Base of the heart :- opposite middle 4 thoracic vertebrae

3 cc
 3 space
 4 cc
 4 space





THANQ

لتَحْقِيقَةِ أَوْصَى اسْتِغْلَاظٍ مِنَ الْمَلْفِ لِنَعْرِفَ الْأَتِيَّ:

بِالْأَحْمَرِ ← هَاهُمْ

بِالْأَحْمَرِ ← هَاهُمْ كَذَلِكَ لَكِنْ بِرَجَاءِ أَحَلِّ

بِالْبُنْفَسِيِّ ← مَنِيَّةٌ لِتَسْهِيلِ الْكِنْفِ

بِالْبَرَقَاتِيِّ ← تَسَاوُلُ أَتْنَاءِ الدِّرَابَةِ / الْمُعَافَرَةِ وَاجَابَتِهِ

بِاقِي الْأَلْوَانِ دَلَالَتُهَا لَيْسَتْ ثَابِتَةٌ لَكِنْ بَعْضُ الْأَحْيَانِ قَدْ تَكُونُ مَعْقُودَةً

مِثْلَ الْأَخْضَرِ لِلْعَقْدِ اللَّيْفَاوِيَّةِ

الْأَحْمَرُ لِلْمَعْمُورِ قَدْ يَرِدُ ذَلِكَ مِنَ الدُّكْتُورِ بِالتَّصْهِيرِ أَوْ التَّمَعُّعِ أَوْ لِلْمَحْظَمَةِ بِرُخْمِهَا أَتْنَاءَ الدِّرَابَةِ

وَعَلَيْهِ لَيْسَتْ كُلُّ كَلِمَةٍ مَذْكُورَةٍ بِالْمَلْفِ قِيلَتْ مِنْ قَبْلِ الدُّكْتُورِ، بَعْضُهَا مَوْجُودٌ لِتَسْهِيلِ الدِّرَابَةِ، مِثْلَ تَرْجِمَةِ بَعْضِ الْكَلِمَاتِ ...
لِأَنَّ أَصْبَتْ فَضْنَ الْمَلِكِ وَإِنْ أَخْطَأَتْ مِنْ نَفْسِي وَمِنَ الشَّيْطَانِ وَالْحَيَاةِ بِاللَّهِ

وَاللَّهُ وَلِيُّ النَّوْفِيَّةِ ۝