

Heart Sounds

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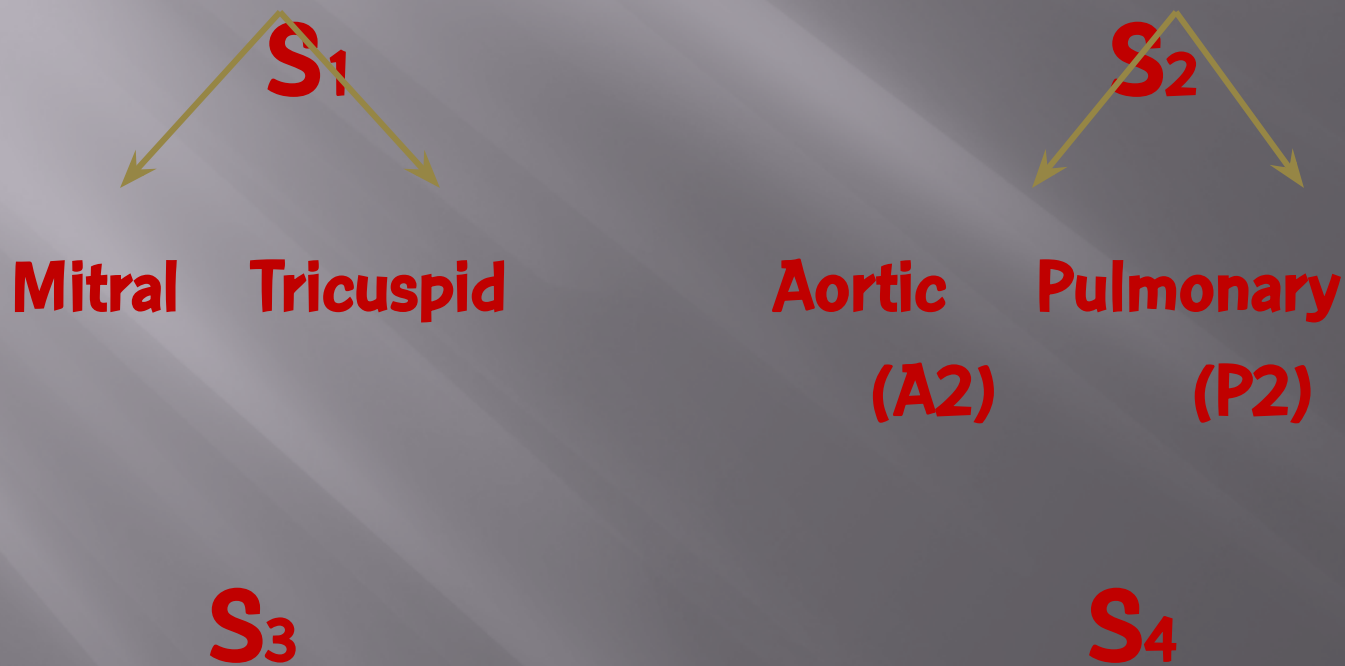
Demonstrator,
KGMC



Introduction

- Heart sounds are produced by Closure of heart Valves.
- Four heart sounds are important clinically
- S1 (Closure of Mitral and Tricuspid Valves)
- S2 (Closure of Aortic and Pulmonic Valves)
S2 has Aortic component (A2) and Pulmonic component (P2)
- S3 due to atria filling the ventricles
- S4 due to atria contracting against ventricle (atrial systole)
- S3 and S4 are usually pathologic.

S1 is systolic sound (low pitched loud sound)
S2 is diastolic sound (High pitched sharp sound)



Ausculatory

Nursecepts.com

Landmarks

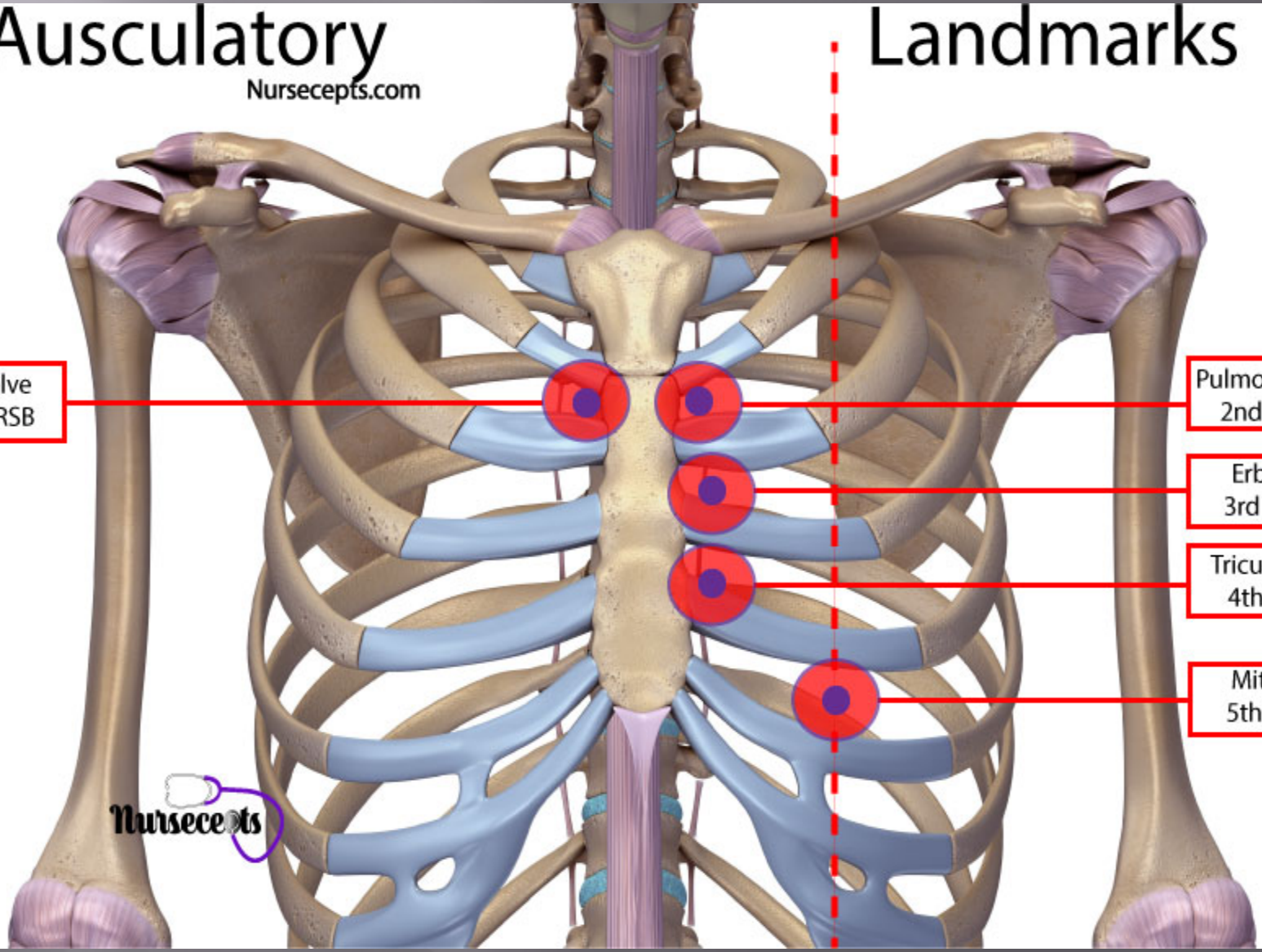
Aortic Valve
2nd ICS, RSB

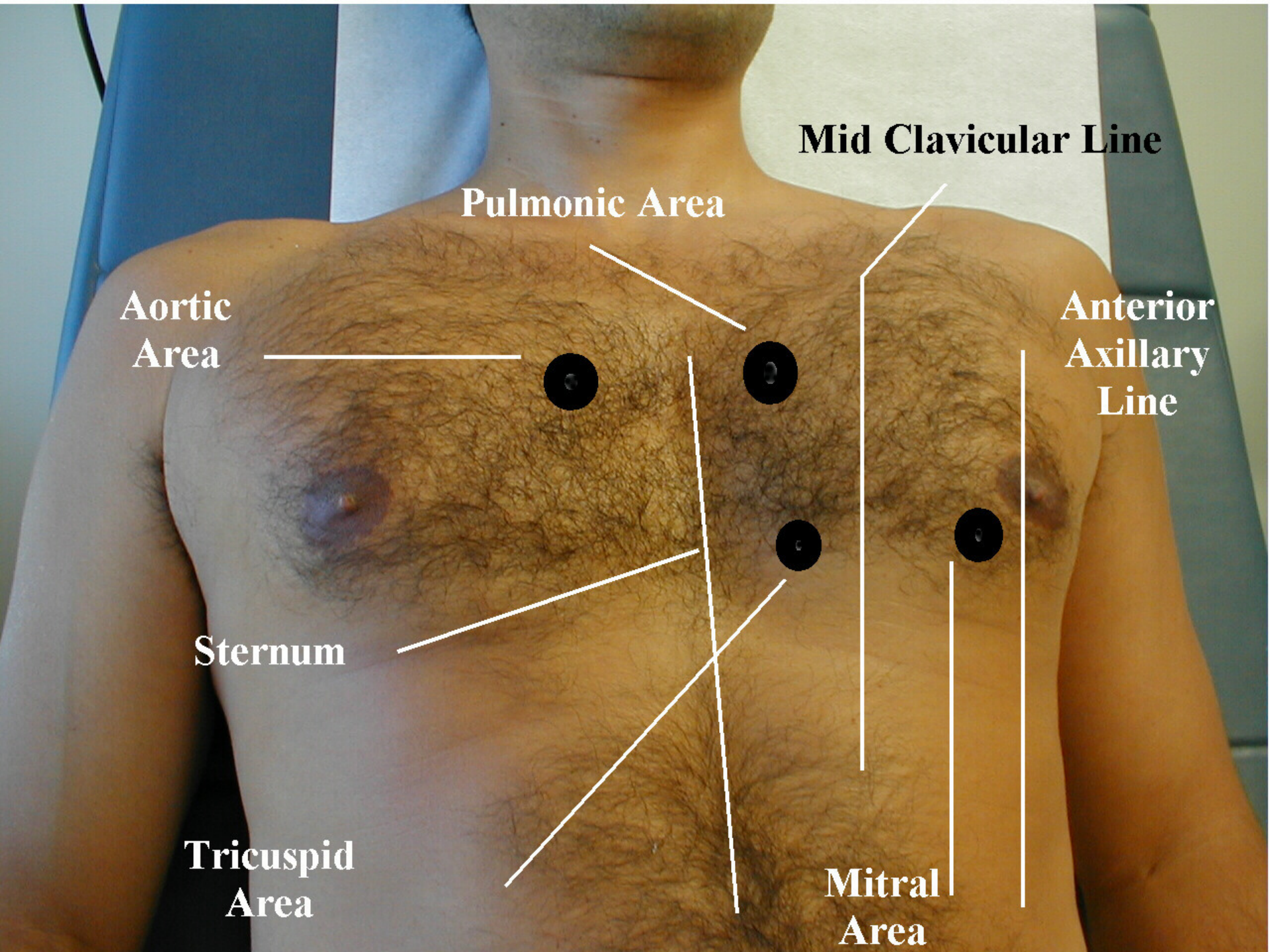
Pulmonary Valve
2nd ICS, LSB

Erb's Point
3rd ICS, LSB

Tricuspid Valve
4th ICS, LSB

Mitral Valve
5th ICS, MCL





Mid Clavicular Line

Pulmonic Area

Aortic Area

Anterior Axillary Line

Sternum

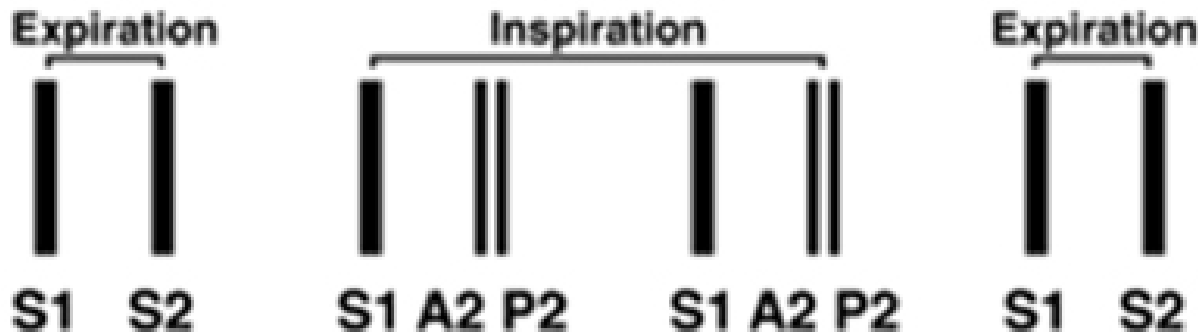
Tricuspid Area

Mitral Area

Clinical Correlates

- Splitting of S1 is difficult to hear because MV and TV close at the same time
- Splitting of S2 occurs during inspiration when the PV closes later than AV (Physiologic Splitting). No Splitting during Expiration.

PHYSIOLOGIC SPLITTING OF S2



What are Murmurs?

- ▣ Abnormal Cardiac sounds due to turbulence in blood flow at or near a heart valve or an abnormal communication within heart
- ▣ Systolic, Diastolic or Continuous.

Thrill

- ▣ A thrill is a vibratory sensation felt on the skin overlying an area of turbulence and indicates a loud heart murmur.

Video Sources

- <https://www.youtube.com/watch?v=pMV3y8r6WOU&vl=en>

Thank you