



Cardiovascular Block

Physiology Team 430

1st Lecture

Heart sounds

Practical

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Heart sounds :

Heart sounds can be detected from the anterior chest wall using a stethoscope. “lub, dub, lub, dub”

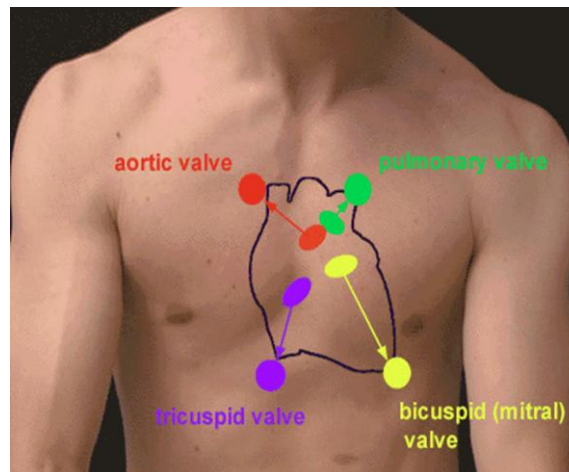
There are 4 heart sounds:

- 1st and 2nd heart sound are easy to hear in all part of chest. (Must be present in all people).
- 3rd heart sound can be heard normally only in children, lean people and pregnant women. (60% of young people).
- 4th heart sound is heard in elderly person.

1st heart sound	2nd heart sound
Closure of the atrioventricular (A-V) valves	Closure of the semilunar valves
LUB sound	DUB sound
dull and prolong	Sharp and short
Heard better in Mitral and Tricuspid areas	Heard better in Aortic and Pulmonary area

Areas of Auscultation:

- **Tricuspid valve:** is best heard at the left half the lower end of the sternum.
- **Mitral valve:** is best heard at the Apex of the heart (Lt 5th intercostal space at the mid-clavicular line)
- **Pulmonary valves:** is best heard at the 2nd intercostal space just left to the sternum.
- **Aortic valve** is best heard at the 2nd intercostal space just right to the sternum.



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Splitting

One sound Split into two sound.

2nd heart sound

Normal when you take a deep breath in

Due to delay closure of pulmonary valve because of increase venous return to the right heart during inspiration.