

Heart sound

Normal Heart Sounds:

Two heart sounds normally heard by a stethoscope during each cardiac cycle.

First Heart Sound (S1):

The first heart sound is caused by the mitral and tricuspid valves closure (AV-valves) at the beginning of systole. The mitral valve closes before the tricuspid valve, although it is not usually possible to appreciate the dual nature of the sound.

Second heart sound (S2):

The second heart sound is caused by the closure of the aortic and then pulmonary valves (semilunar valves). Because the delay is greater than in the first heart sound this usually can be heard. The splitting becomes wider with inspiration and narrower with expiration.

The four main areas usually used to listen to the heart sounds

- Mitral valve: at the position of the apex beat.
- Tricuspid valve: over the xiphoid process.
- Aortic valve: in the 2nd right intercostals space.
- Pulmonary valve at the 2nd left intercostals space.

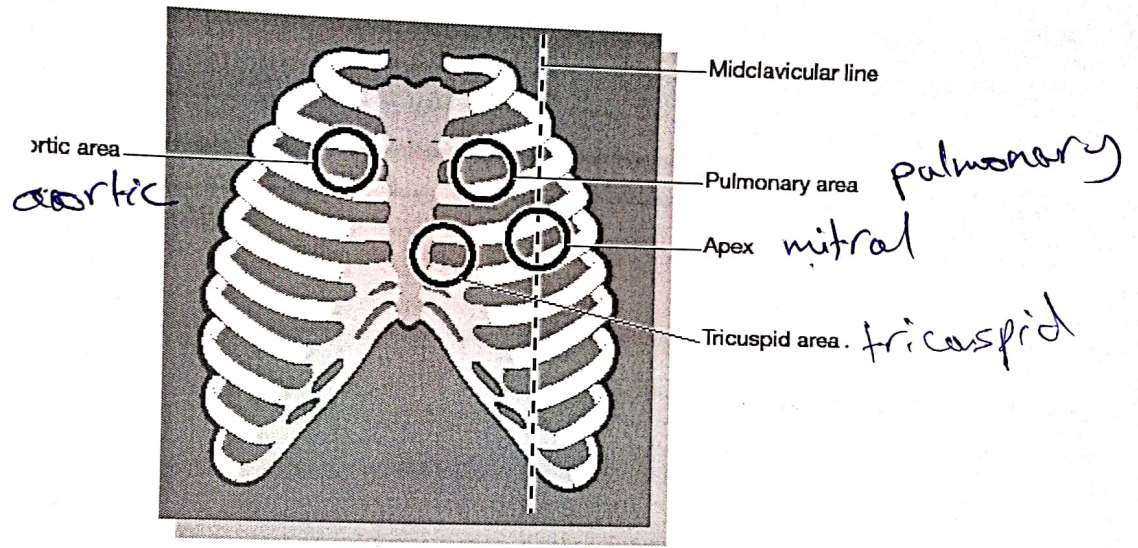


Figure 8: Auscultation of precordium.