THE STUDY VAULT

Clinical Chaos

Heart Tones

SKILL SNAPSHOT

Purpose
- Assesses valve closure, rhythm, rate, extra sounds, murmurs, and changes in cardiac function through systematic auscultation.

When to use
- Routine cardiovascular assessment and with chest symptoms, dyspnea, fluid change, known cardiac disease, or hemodynamic instability.

Supplies needed
- Stethoscope with diaphragm and bell; watch; quiet environment; positioning support.

PREP + PATIENT SETUP
- Explain exam and provide privacy; reduce room noise.
- Position supine with head elevated 30-45 degrees initially.
- Palpate landmarks; warm stethoscope.

VAULT TIP
- Move valve area to valve area in the same order every time; consistency makes subtle changes easier to detect.

STEP-BY-STEP
1. Hand hygiene; identify patient; assess symptoms, color, breathing, neck veins, edema, and peripheral perfusion.
2. Use diaphragm first for higher-pitched S1, S2, many murmurs, and rubs; use bell lightly for low-pitched sounds.
3. Auscultate aortic area: 2nd right intercostal space at sternal border.
4. Auscultate pulmonic area: 2nd left intercostal space at sternal border.
5. Auscultate Erb point: 3rd left intercostal space at sternal border.
6. Auscultate tricuspid area: 4th-5th left intercostal space at lower sternal border.
7. Auscultate mitral/apical area: 5th left intercostal space at midclavicular line.
8. At each site, identify rate/rhythm, S1/S2, splitting, extra sounds, murmurs, and rubs. Compare with apical pulse.
9. For suspected mitral sounds, position left lateral and listen at apex with bell.
10. For aortic sounds, have patient sit up, lean forward, exhale, and briefly hold if tolerated; listen along left sternal border with diaphragm.
11. Describe abnormal sound by timing, location, pitch, quality, intensity/grade, radiation, and response to position.
12. Correlate findings with BP, pulses, lungs, edema, symptoms, and prior baseline; report new abnormal or unstable findings.

SAFETY REMINDERS
- Do not delay emergency response for a complete exam in an unstable patient.
- Use bell lightly; pressure turns it functionally into a diaphragm.
- New murmur with hypotension, chest pain, syncope, or dyspnea is urgent.
- S3/S4 meaning depends on age and clinical context.

COMMON MISTAKES
- Listening through clothing.
- Wrong intercostal landmarks.
- Using only the diaphragm.
- Calling any extra sound a murmur.

DOCUMENTATION
- Rate/rhythm and S1/S2.
- Extra sounds, murmur/rub description.
- Patient position and site of best hearing.
- Associated cardiovascular findings.
- Symptoms, comparison, notifications.