

STEP 1 REVIEW

CARDIOLOGY

High-Yield Clinical Presentations



MED STUDENT SUCCESS

- **Wide and fixed split S2**
- **Paradoxical emboli**

ASD

- **High pitched holosystolic murmur at Left lower sternal border**

VSD

- **Loud, harsh continuous murmur**
- **Peripheral pulses are accentuated**

PDA

- Blue baby
- Systolic ejection murmur along mid to upper sternal border
- Squatting improves cyanosis

- Syncope with exertion
- Crescendo-decrescendo murmur at left lower sternal border
- IV septal hypertrophy

Tetralogy of Fallot

Hypertrophic cardiomyopathy

- Nose bleeds
- High BP in UE
- Low BP in LE

- Athlete
- Enlarged LV cavity
- No atrial enlargement

- High-pitched late systolic murmur
- Mid-systolic click

Coarctation of the Aorta

Athlete's heart

Mitral valve prolapse

- Old man with syncope
- Crescendo-decrescendo murmur at Right 2nd intercostal space

- Bounding pulses
- Early decrescendo murmur at the Right 2nd intercostal space

- Early decrescendo murmur at the Left 2nd intercostal space

Aortic stenosis

Aortic regurgitation

Pulmonic regurgitation

- Holosystolic murmur at apex

- Opening snap after S2
- Diastolic rumble

- IV drug user
- holosystolic murmur at sternum
- Increases with inspiration

Mitral regurgitation

Mitral stenosis

**Tricuspid
regurgitation**

- Irregular irregular heartbeat
- Immigrant to the US
- Holosystolic murmur at the apex

- Fever
- Erythematous and nontender macules on palms/soles
- Hemorrhages in nails
- Holosystolic murmur at the apex
- Left-sided hemiparesis

Rheumatic fever

**Infective
Endocarditis**

- Upper respiratory tract infection
- S3
- Enlarged cardiac silhouette

- Chest pain better with leaning forward
- ECG-diffuse ST elevation

- Tuberculosis
- Sound after S2 in early diastole
- Calcification around heart

Viral Myocarditis

Pericarditis

**Constrictive
Pericarditis**

- Muffled heart sounds
- Jugular venous distention
- Hypotension
- Variation of SBP with Respiratory cycle
- ECG- varying amplitude QRS

- Stent placement
- Purple mottling of skin

- Syncope with arm raising
- Differential brachial pulses

Cardiac Tamponade

Cholesterol Emboli

Subclavian steal syndrome

- HTN
- Smoker
- Pulsating abdominal mass

AAA

- Tearing chest pain
- Widened Mediastinum

Aortic dissection

- Painless genital ulcer
- Tree-bark appearance of aorta

TAA

- Chest pain with exertion
- Improves with rest

- Chest pain at rest

- Cocaine
- Chest pain
- Transient ST Elevation

- Chest pain at rest
- Elevated Troponin

Stable Angina

Unstable Angina

Vasospastic Angina

NSTEMI

- Chest pain radiating to jaw
- Elevated Troponin
- ST segment elevation

- ST elevation in leads II, III, Avf
- Bradycardia

- ST Elevation in leads V1-V4

- ST elevation in leads V5-V6

STEMI

Inferior MI - RCA

Anterior MI - LAD

Lateral MI - LCX

- Sudden cardiac death

Ventricular arrhythmia

- Day 2-7 post MI
- Holosystolic murmur at apex

Papillary muscle rupture

- Day 3-5 post MI
- Holosystolic murmur at Left lower sternal border

IV Septum rupture

- 1-2 weeks post MI
- Hypotension
- JVD
- Muffled heart sounds

**LV free wall
rupture**

- Weeks to months post MI
- Pericardial friction rub
- Calcifications
- Impaired filling

Dressler syndrome

- Young female
- Bruit near flank
- High BP

**Fibromuscular
dysplasia**

- Old man
- Atherosclerosis
- High BP
- Bruit near flank

**Renal artery
stenosis**

- High BP
- Hypokalemia

Hyperaldosteronism

- Alcohol, Post partum,
Chagas disease,
Doxorubicin
- S3

- B-myosin gene mutation
- Crescendo-decrescendo
murmur
- S4

- Diagnosis of Colon cancer
- Chest pain
- T-wave inversion

Dilated Cardiomyopathy

Hypertrophic cardiomyopathy

Stress induced Cardiomyopathy

- **Smoker**
- **Shortness of breath**
- **JVD**
- **Edema in Lower extremities**
- **Ascites, Nutmeg liver**

RHF

- **Shortness of breath**
- **Crackles in lungs**
- **High BNP**
- **Improvement with furosemide**

LHF

THANK YOU!

Questions?

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More STEP Resources: medstudentsuccess.com



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