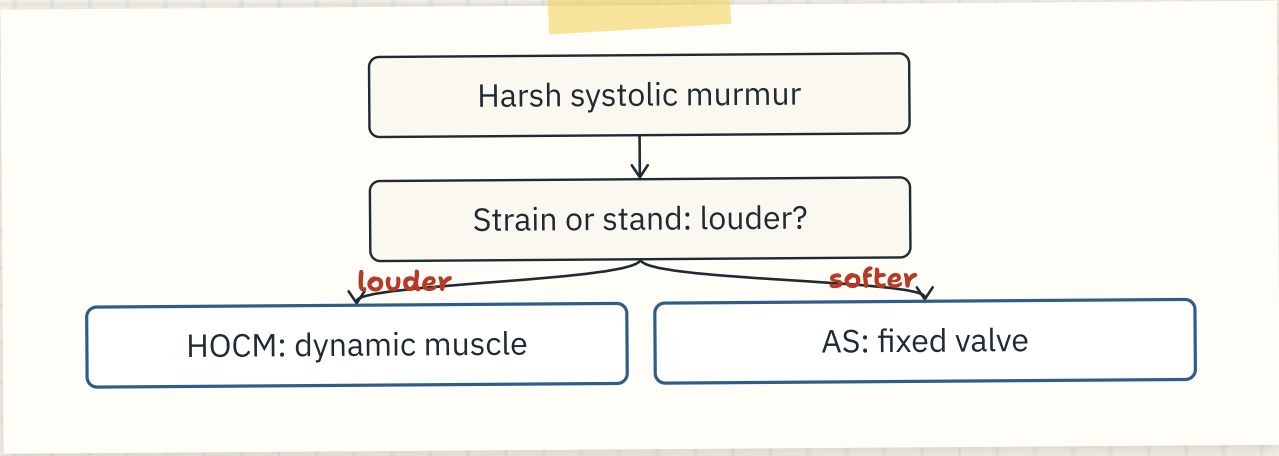
HOCM vs aortic stenosis

Same systolic murmur, opposite mechanisms



Step by step

1. AS: fixed valve; murmur follows flow; right upper sternal border, radiating to carotids; pulse weak and slow (parvus et tardus)
2. HOCM: dynamic septum + systolic anterior motion; murmur late-peaking at the left sternal border, toward the suprasternal notch
3. HOCM pulse brisk and bifid; S4 common (stiff, thick ventricle)
4. Treatment of obstructive HCM: avoid dehydration and vasodilators; use beta blockers

Manoeuvre	HOCM	AS
Valsalva strain / stand from squat	Louder	Softer
Squat / passive leg raise	Softer	Louder
Handgrip (↑ afterload)	Softer	not covered

Murmur response to manoeuvres

Preload rule

AS follows preload: less blood, softer.

HOCM runs against it: less preload, louder.

Exam traps

- Both murmurs are systolic: separate them by mechanism, manoeuvre and pulse, not timing.
- A weak, delayed carotid upstroke is aortic stenosis; a brisk, bifid one is HOCM.
- Radiation differs: carotids in AS, suprasternal notch (not carotids) in HOCM.

HOCM vs aortic stenosis murmur: telling them apart at the bedside

Video, written lesson, practice question and sources: medservatory.com/usmle-step-1/heart-sounds-murmurs-ecg/hocm-vs-aortic-stenosis-murmur

For exam study only, not medical advice. Follow local guidelines and your lab's ranges.
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