



Egyptian Society of
CARDIOLOGY

Mansoura University Suez Canal University Zagazig University

45TH
45th Annual International Congress of the
EGYPTIAN SOCIETY OF CARDIOLOGY
CardioEgypt 2018

Pseudo infarction; Unusual finding

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History

- Male patient, 22 years, with no medical history and no special habits.
- Presented with shortness of breath with exertion.
- Family history of SCD of his twin brother one year ago.

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Examination:

- Short stature.
- Average normal vital signs.
- Cardiac examination: weak heart sounds.
- Chest examination: basal rales and scattered rhonchi.



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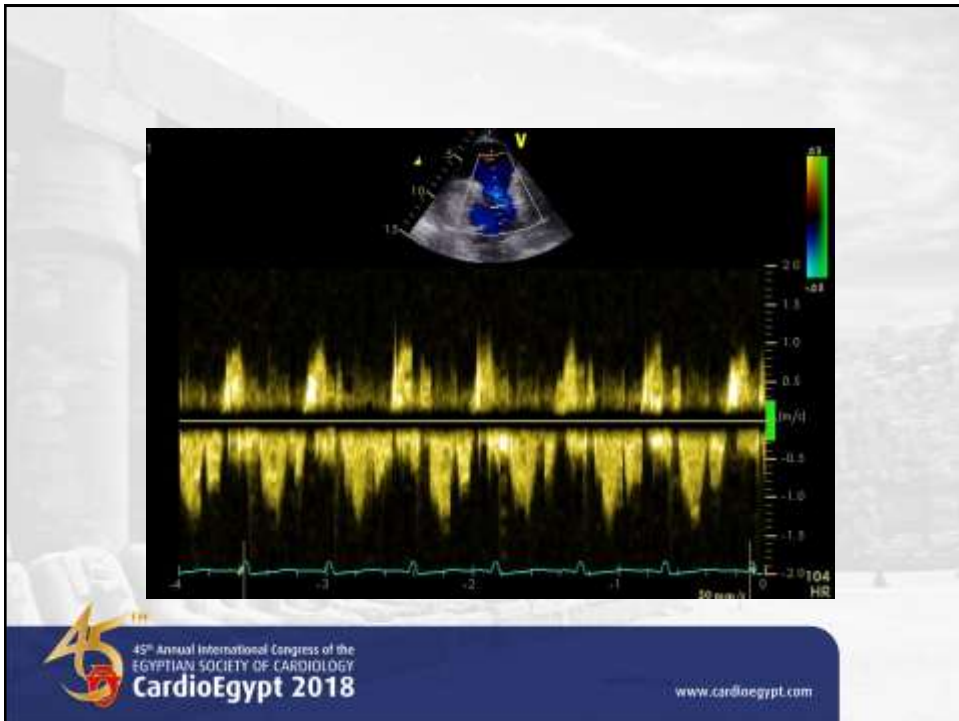
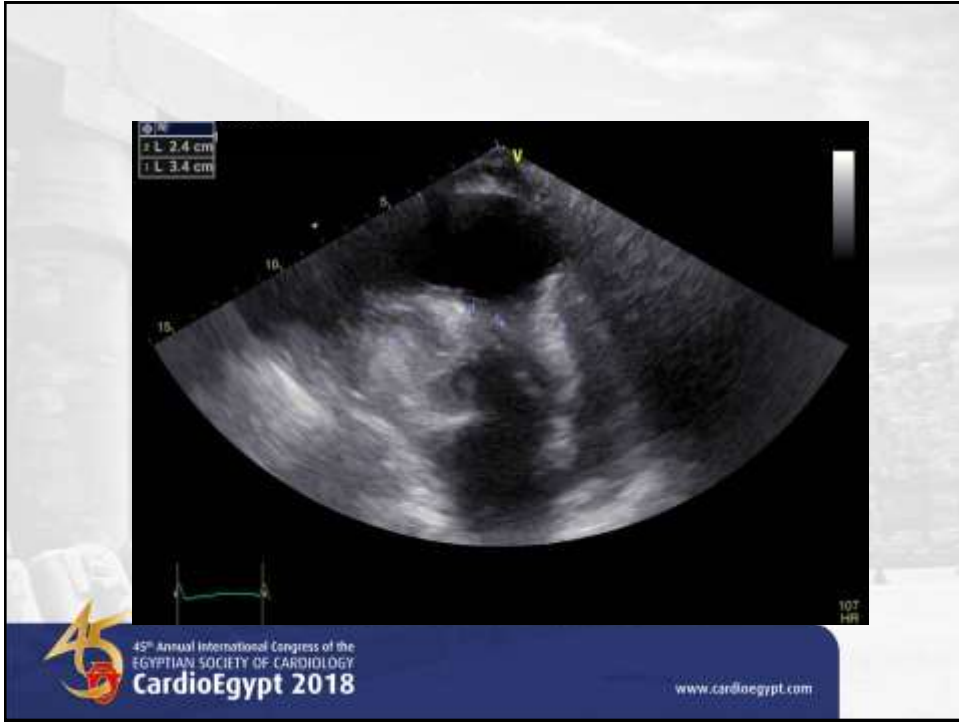
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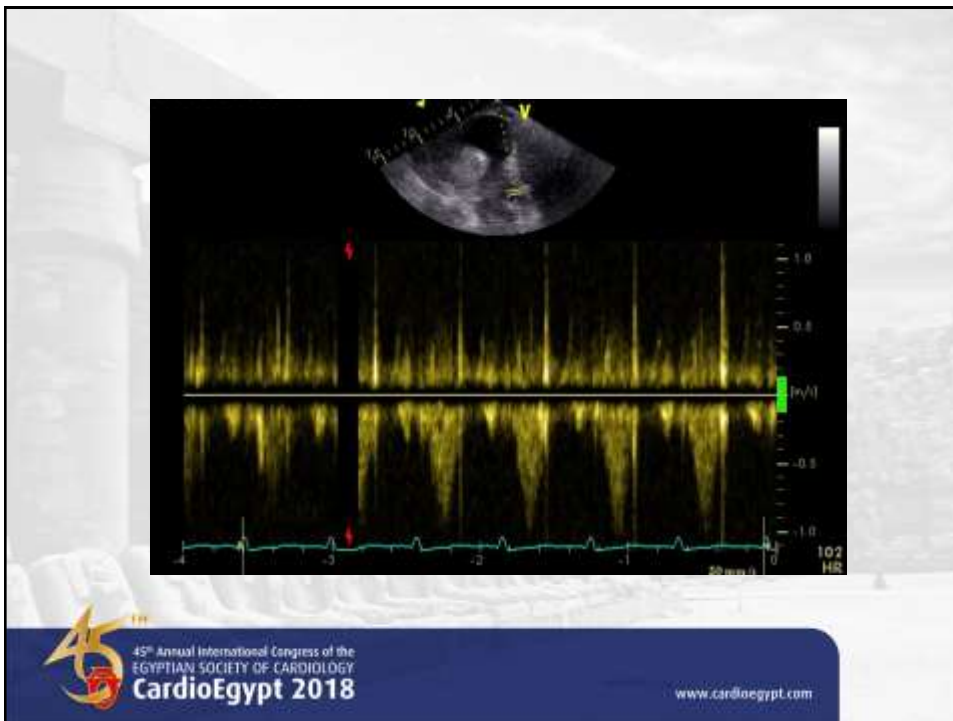
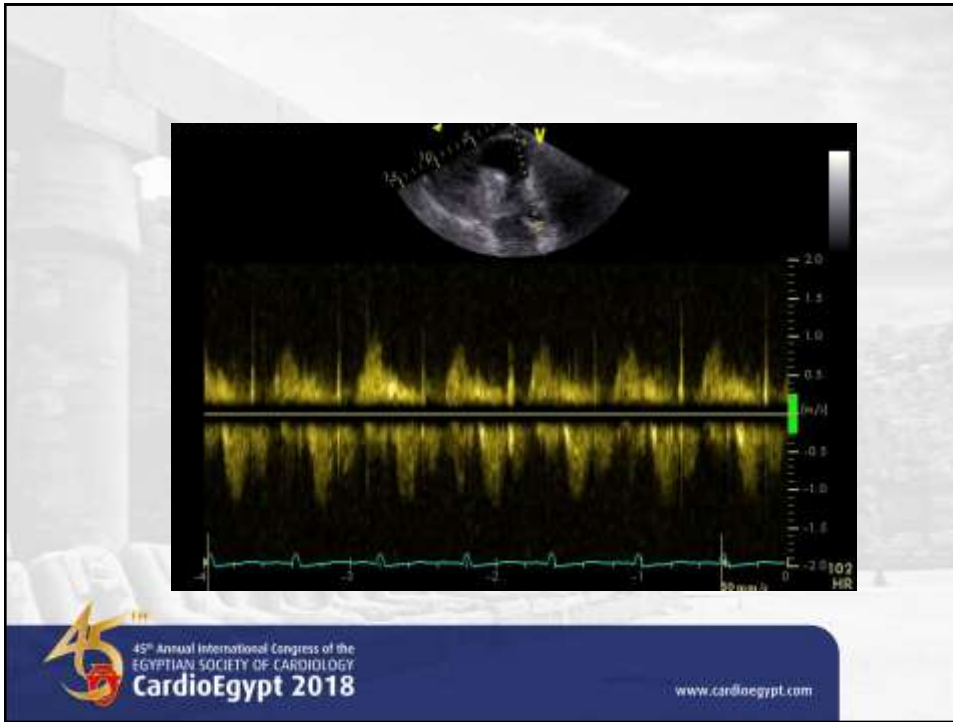
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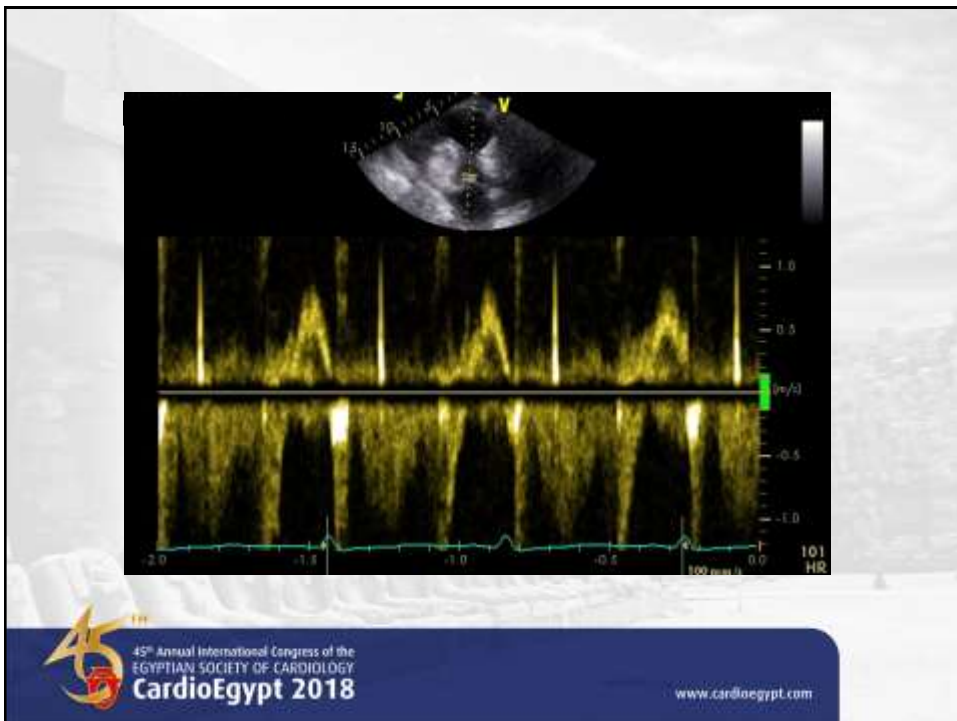
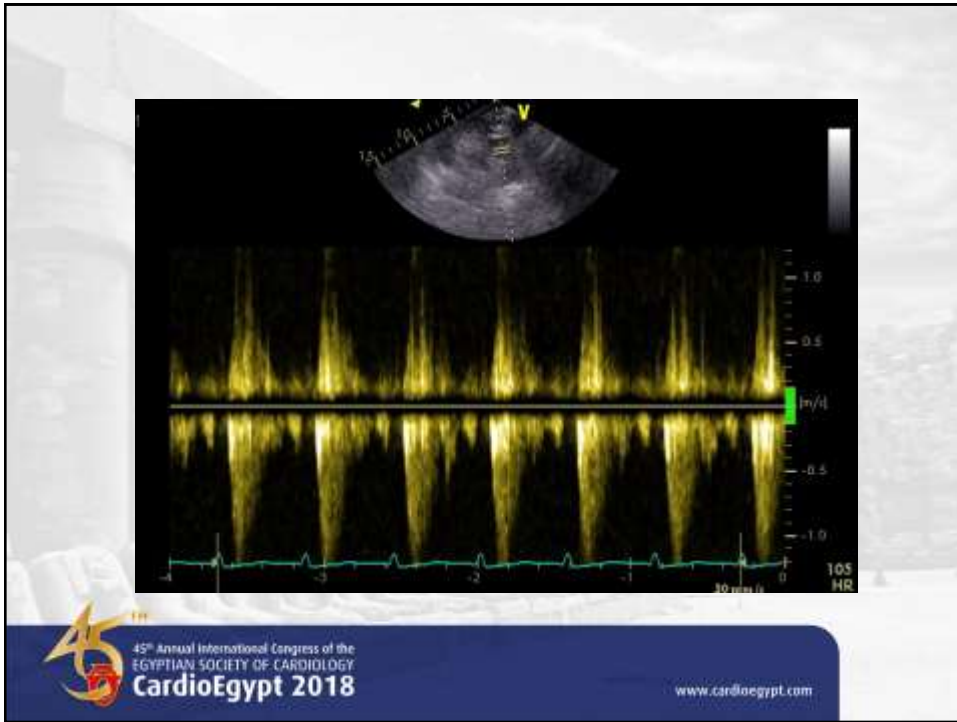


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???

- Mid cavity HCM with LV apical aneurysm.
- What is the next step???



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From HCM ESC Guidelines 2014

CMR with LGE imaging should be considered in patients with suspected apical hypertrophy or aneurysm.

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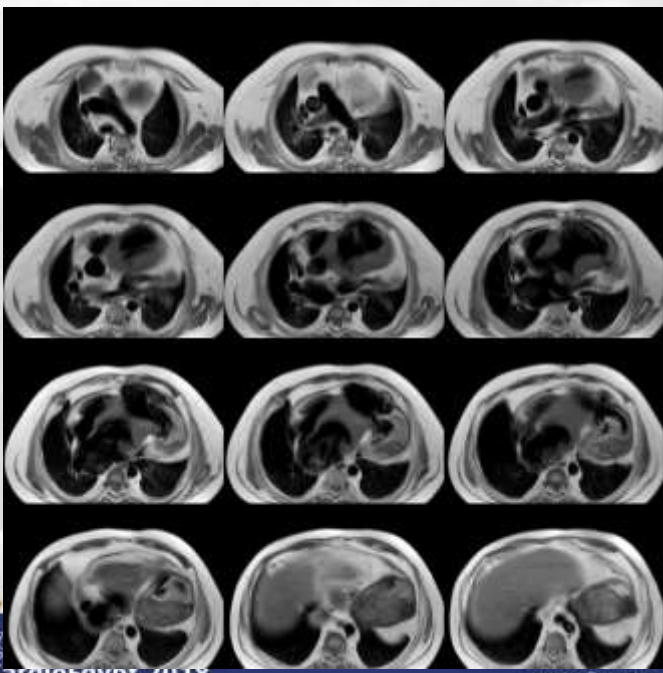
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Cardiac MRI



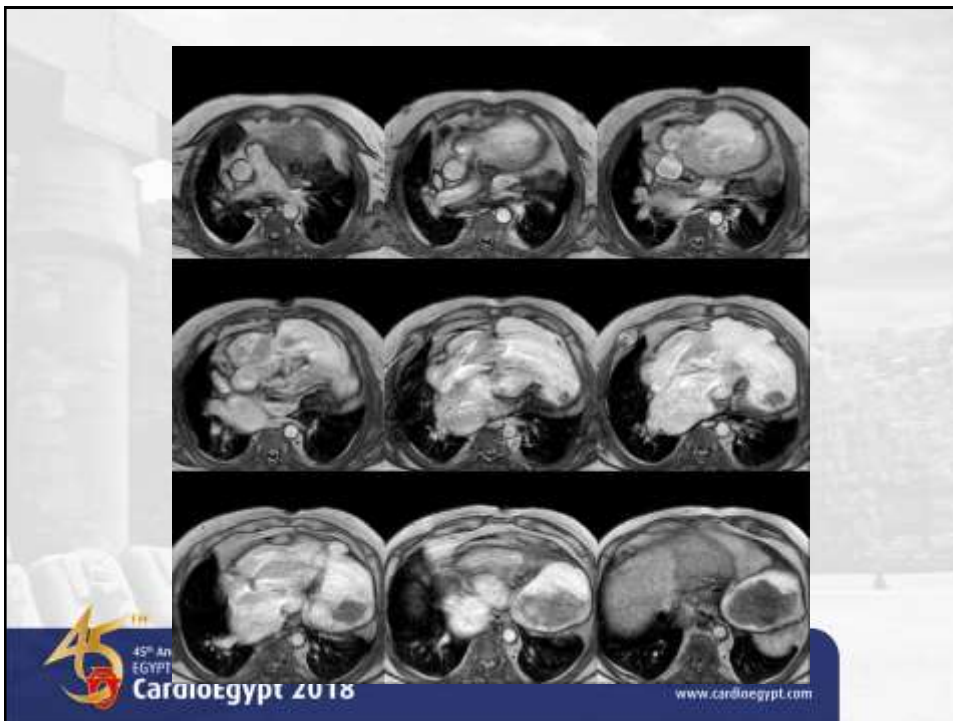
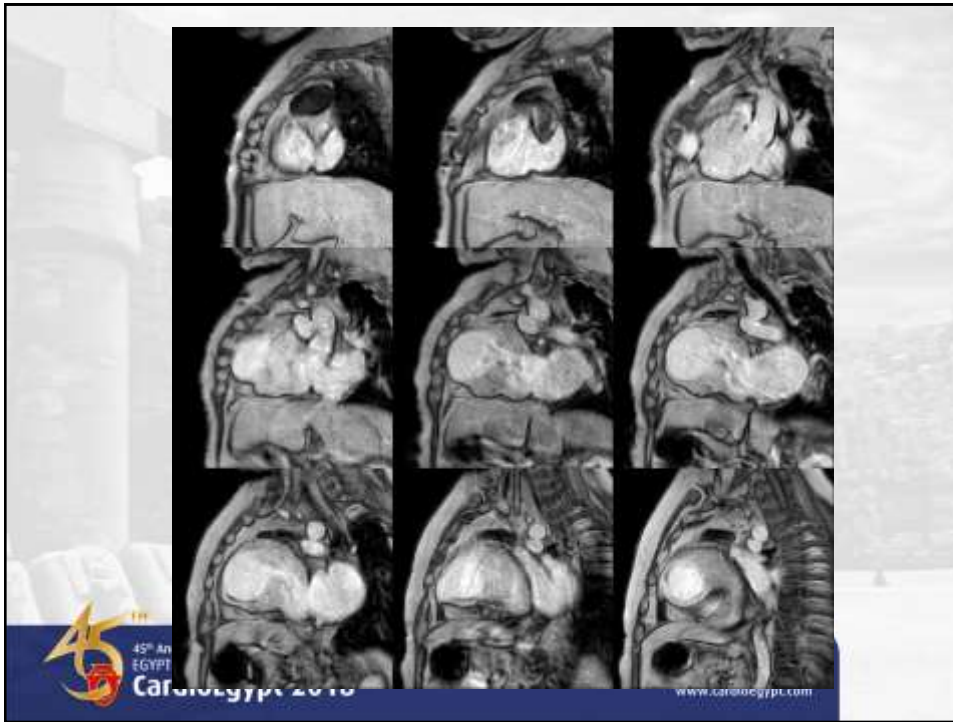
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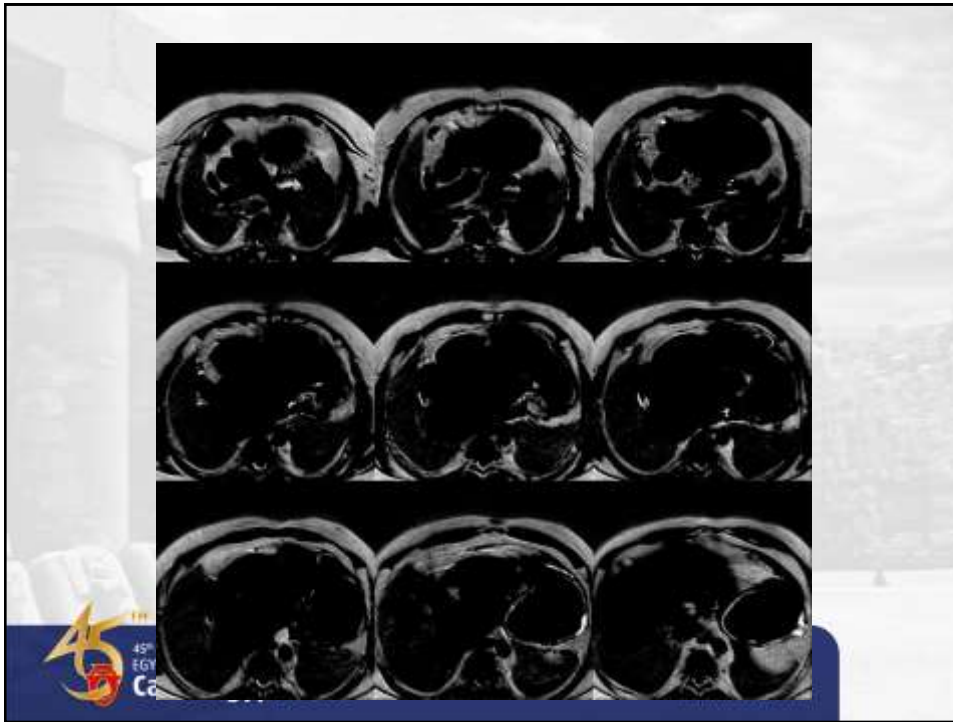
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Left ventricular mid-cavity obstruction and apical aneurysms

Incidence:

- Left ventricular mid-cavity obstruction occurs in approximately **10%** of patients with HCM.
- Patients are very symptomatic (heart failure and SCD).
- Approximately **25%** of patients also have an LV apical aneurysm which, is associated with higher cardiovascular mortality.



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Original Article

Association of ST elevation with apical aneurysm in hypertrophic cardiomyopathy

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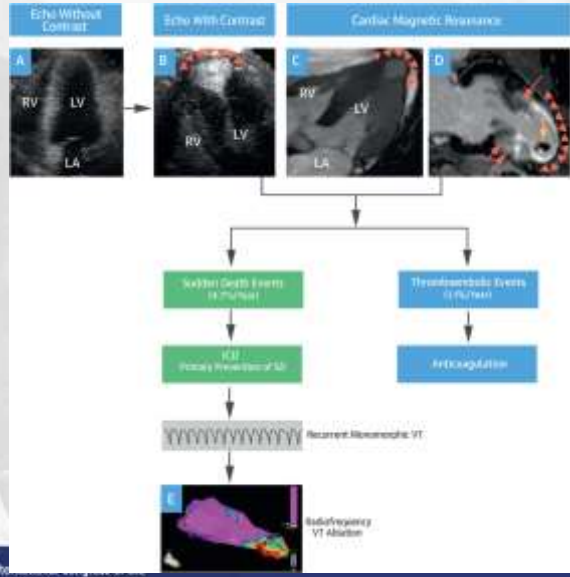
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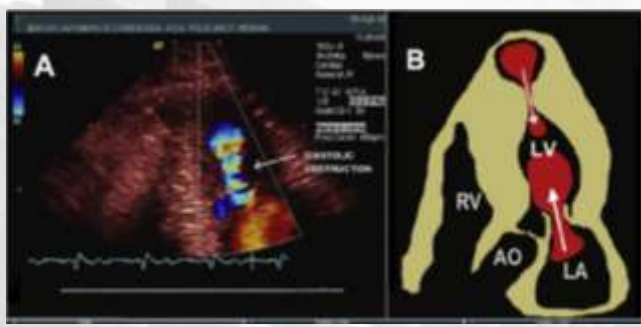
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Diagnosis & risk stratification



Echocardiography



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Echocardiography

CASE REPORTS

Continuous Apex to Left Ventricle Blood Flow Pattern in Hypertrophic Cardiomyopathy with Apical Aneurysm and Midventricular Obstruction

Bill P.C. Hsieh, M.D., James Tauras, M.D., and Cynthia Taub, M.D.
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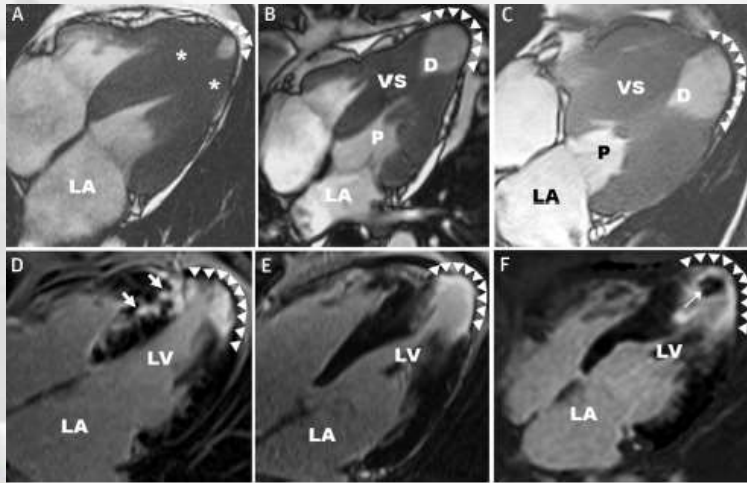
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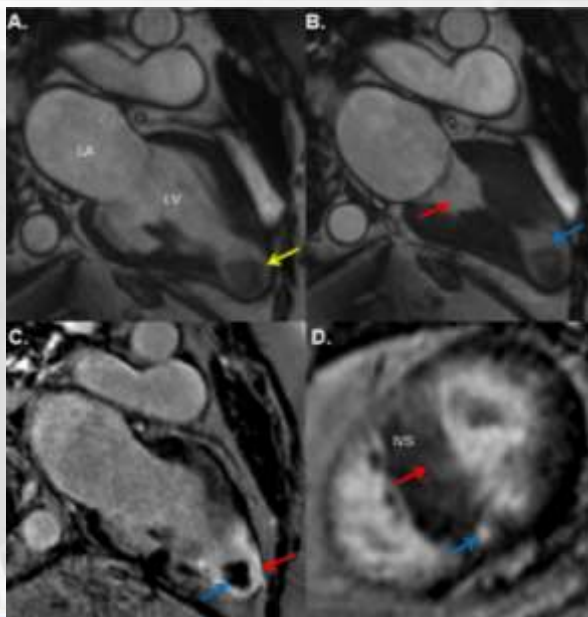
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CMR



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Management of LV mid-cavity obstruction

- Patients with LV mid-cavity obstruction should be treated with **high dose β -blockers, verapamil or diltiazem**, but the response is often suboptimal.
- Small experience, mostly from single centres, suggests that mid-ventricular obstruction can be relieved by **transaortic myectomy**, a transapical approach or combined transaortic and transapical incisions, with good short-term outcomes.



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Management of LV apical aneurysms

- Long-term oral **anticoagulation**.
- **Prophylactic ICD** if other clinical features that suggest an increased risk of SCD.



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Reference

- Saba, et al., Hemodynamic consequences of hypertrophic cardiomyopathy with midventricular obstruction: apical aneurysm and thrombus formation. *J Gen Pract (Los Angel)*. 2014; 2(4): doi:10.4172/2329-9126.1000161.
- Maron et al. Prevalence, clinical significance, and natural history of left ventricular apical aneurysms in hypertrophic cardiomyopathy. *Circulation* 2008; 118:1541–1549.



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