Hypertrophic Cardiomyopathy

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52 year old male

- Shortness of breath
- Murmur on auscultation
- Abnormal ECG

Saurora Health Care*

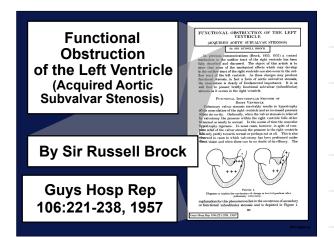
- •BP: 136/86, Pulse: 66 bpm
- Echocardiogram

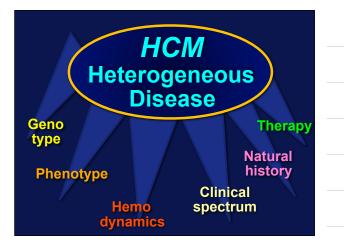
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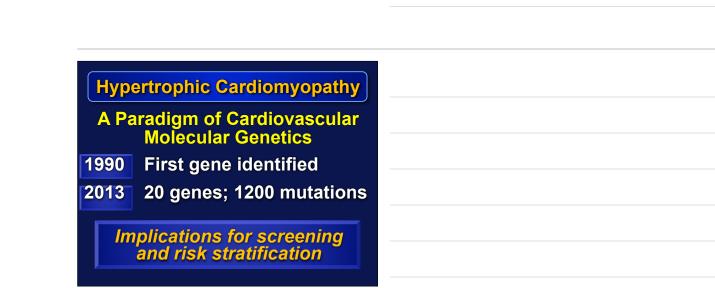
 Most common genetic CM

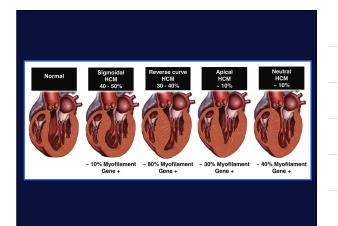


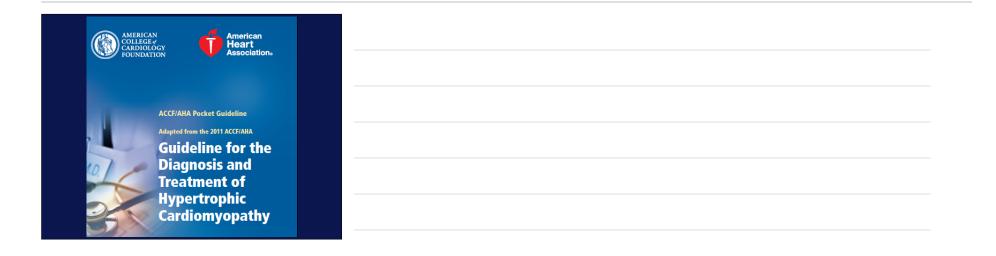
Autosomal dominant
Prevalence - 1 : 500
Sarcomeric gene mutation
Myofiber disarray
1% risk of sudden cardiac death











European Hear Journal ESC GUIDELINES	
2014 ESC Guidelines on diagnosis and management of hypertrophic cardiomyopathy	
The Task Force for the Diagnosis and Management of Hypertrophic Cardiomyopathy of the European Society of Cardiology (ESC)	
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Evaluation of HCM by Echocardiography

Echo is GOLD standard for Morphologic/hemodynamic assessment

Guide Management

Risk Assessment/Prognosis

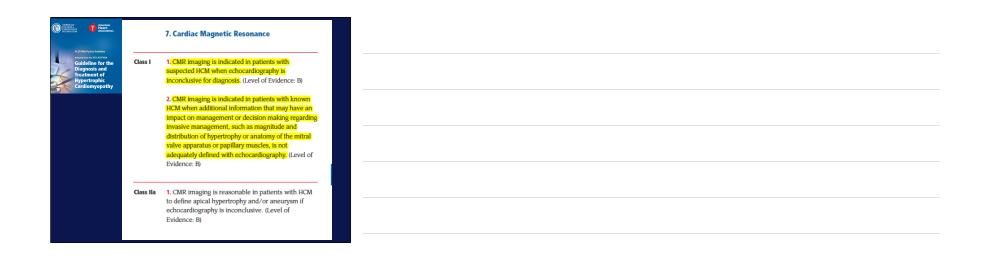
Screening of Family members

Hypertrophic Cardiomyopathy Echocardiographic Diagnosis Left Ventricular Hypertrophy ≥ 15 mm

_eft Ventricular Hypertrophy ≥ 15 mm (Asymmetric >> Symmetric)

In the absence of another cardiovascular or systemic disease associated with LVH or myocardial wall thickening

Gersh BJ, et al. JACC. 2011;58:e212 ACC/AHA Guidelines



Left Ventricular Morphology in HCM Sigmoid Septum Reverse Septum Apical Variant Neutral Septum Image: Septu

LV wall thickness

(Extent and Distribution)Most common location of hypertrophy is the basal anterior septum.

- Imperative to determine the maximum LV wall thickness irrespective of views.
- If LV borders cannot be accurately delineated, echo contrast is useful.

LV Systolic Function

- Typically have hyper-dynamic LVEF (>65%) and small LV cavities.
- LVEF <50% : "burnt out HCM" (2 5%).
- Longitudinal Strain imaging can aid in detection of sub-clinical LV systolic dysfunction.
- Longitudinal strain is useful in early detection of disease.