

Myocardial diseases

- **Hypertrophic cardiomyopathy:**

- high EF
- it can contract but can't relax
 - Results in diastolic dysfunction.
- it's a marked hypertrophy to the left ventricle +/- right ventricle, disproportionate hypertrophy of the septum
- causes:
 - HTN
 - most common cause
 - Concentric hypertrophy
 - S4 gallop present (since we have a left ventricular hypertrophy)
 - Hypertrophic obstructive cardiomyopathy
 - metal aortic stenosis murmur
 - far2 ma3 el aortic enno gher location w no change in intensity w irradiation sob ta7et
 - kamen here fina nshouf mitral regurge ma3 holosystolic murmur
 - HOCM
 - Hypertrophy more dominant at **interventricular septum** rather than left ventricle.
 - This hypertrophy will obstruct the blood flow when preload decreases or dilation of peripheral vessels (e.g. during exercise) presents with syncope and sometimes sudden death (due to ventricular arrhythmias)
 - Autosomal dominant usually
 - chromosome 14
 - S4 Gallop not present & have fewer sign of backward heart failure like pulmonary edema, right heart failure, and hepatomegaly.
 - It is the main cause of sudden death in a healthy playing child
 - Symptoms:
 - **Dyspnea is the most common presentation**
 - **Angia, palpitations, syncope**
 - factors that increase obstruction: (decrease the size of the ventricle)
 - Increase contractility:
 - Digoxin (empties more)
 - Beta agonist (goes faster)
 - Tachycardia
 - since ventricle fills during diastole and no more time to fill
 - Decreases preload:
 - valsalva or standing
 - decrease intravascular volume
 - nitrates and vasodilators
 - tachycardia
 - Decreases afterload: