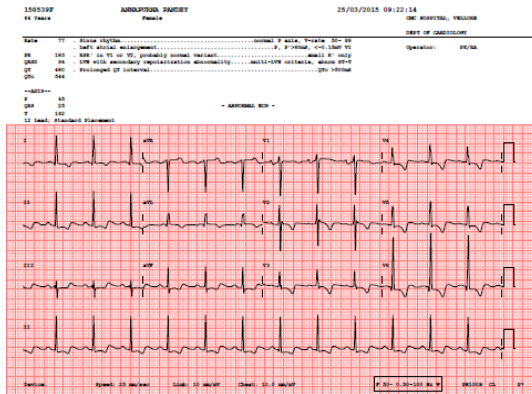


CLINICAL DATA: 62 year old lady with exertional angina class II for the past 3 years

ECG : Normal rate with sinus rhythm, Left atrial enlargement, LVH with secondary repolarization abnormality, Prolonged QT



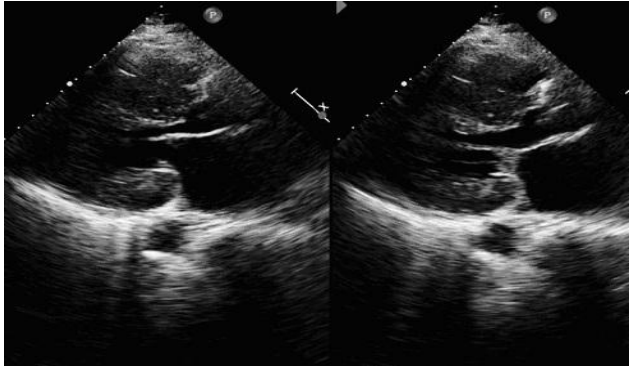
CXR: What are your findings in the given CXR?



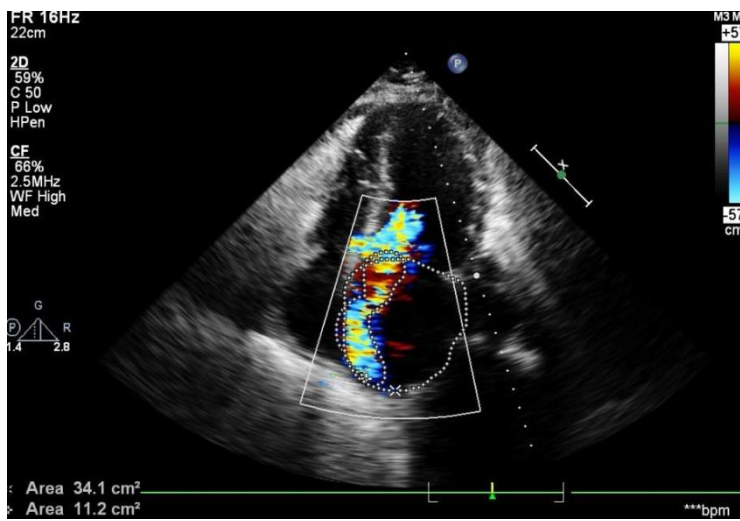
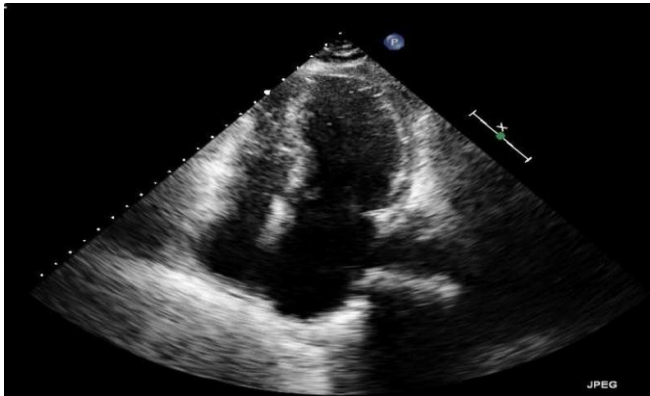
ANS: Cardiothoracic ratio of (26/18) 69%; Pulmonary venous hypertension

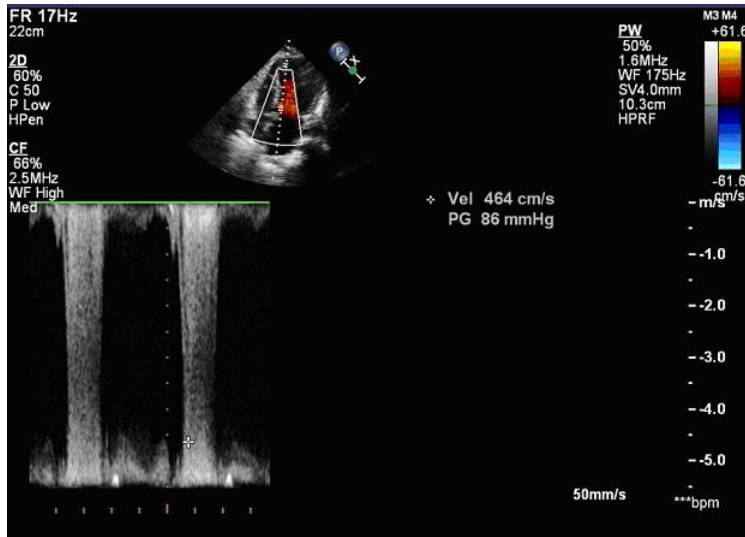
ECHO : What are the findings on ECHO?

PARASTERNAL LONG AXIS



4CHAMBER





ANS: Assymmetric septal hypertrophy, Grade III SAM, Normal LV Function, Moderate MR, mild TR

CONVENTIONAL CORONARY ANGIOGRAM: Normal coronary arteries

CARDIAC MRI:

Q1. What is the finding in the following b SSFP images

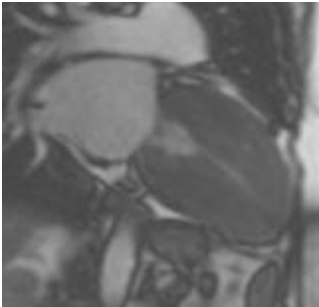
TRUE AXIAL



2C VIEW IN END DIASTOLE



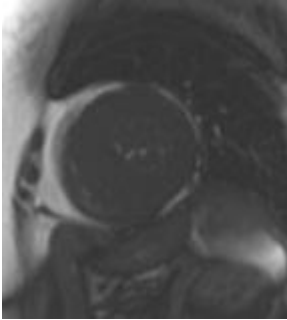
2C VIEW IN END SYSTOLE



SA AT END DIASTOLE



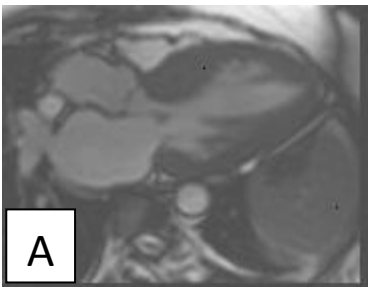
SA AT END SYSTOLE



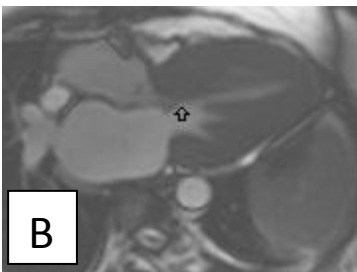
ANS: Asymmetric thickening of the anterior septal and inferior myocardium with RV hypertrophy

Q2. What do you see in the LVOT view (A, B, C, D) view of the cardiac MRI

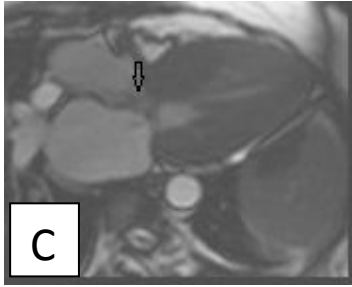
LVOT IN DIASTOLE



LVOT IN SYSTOLE



LVOT IN SYSTOLE



LVOT IN SYSTOLE



ANS:

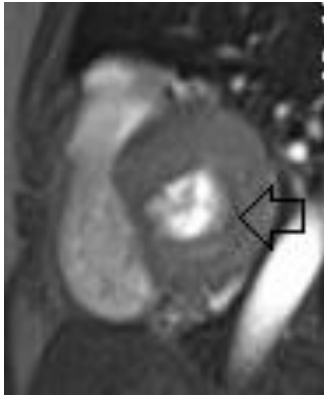
- A. Septal thickening at the level of the LVOT
- B. Systolic anterior wall motion of the anterior mitral valve leaflet (SAM)
- C. Jet in the LVOT due to Venturi effect
- D. Mitral regurgitation secondary to SAM

Q3. What is your diagnosis?

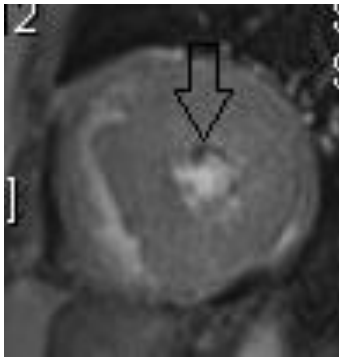
ANS Hypertrophic obstructive cardiomyopathy

Q5. What is the finding in the rest perfusion scan?

PERFUSION A



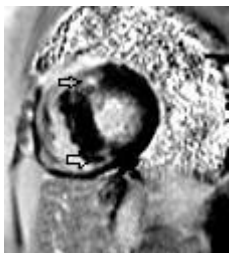
PERFUSION B



ANS: Circumferential hypointensity indicating microvascular obstruction due to increased muscle mass.

Q6. What is the finding in the delayed enhancement scan?

PSIR short axis image at mid cavity level



PSIR short axis at midcavity level



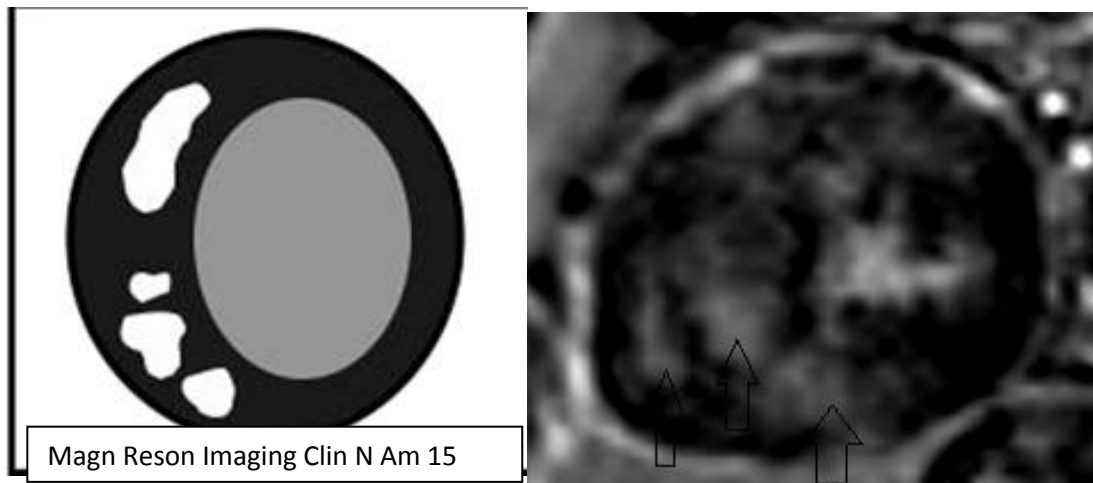
ANS: Focal areas of delayed hyperenhancement at anterior and posterior insertion of the right ventricle.

Q7. Is there any other described delayed enhancement pattern in HCM?

ANS: Patchy, cloudy hyperenhancement usually in the mid myocardial location.

MRIC2007.jpeg

PATCHYENHANCEMENT.JPEG



Q8. What is the treatment for HOCM?

ANS:

1. Surgical myomectomy
2. Alcohol septal ablation with pacemaker back up

Q9. What is the complication associated with the treatment?

Ans: Induction of arrhythmias due to focal myocardial infarction.