

ATRIAL MYXOMA- BEST IMAGING MODALITY FOR DIAGNOSIS ??

Presenting author:Dr.M.Saranya

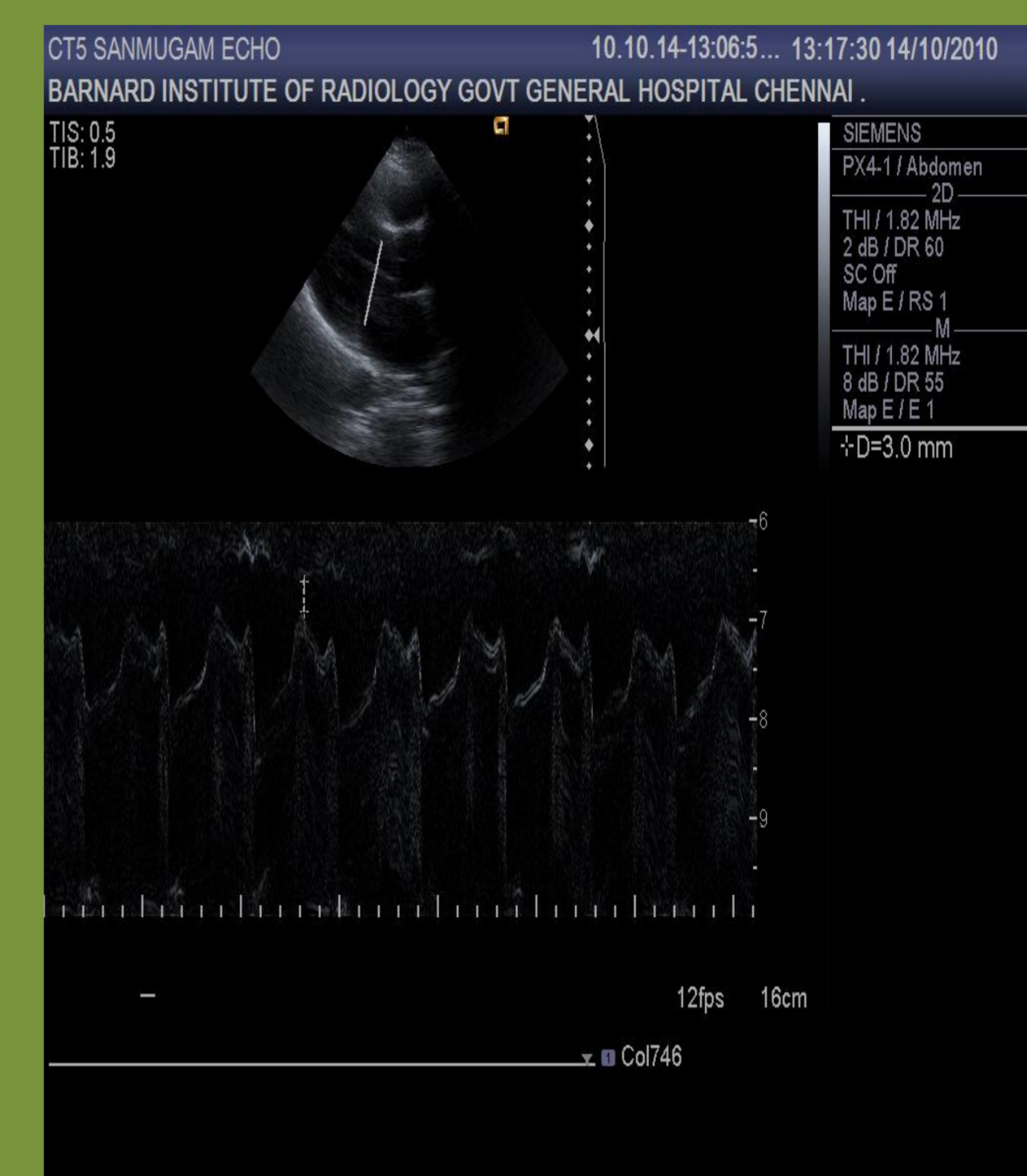
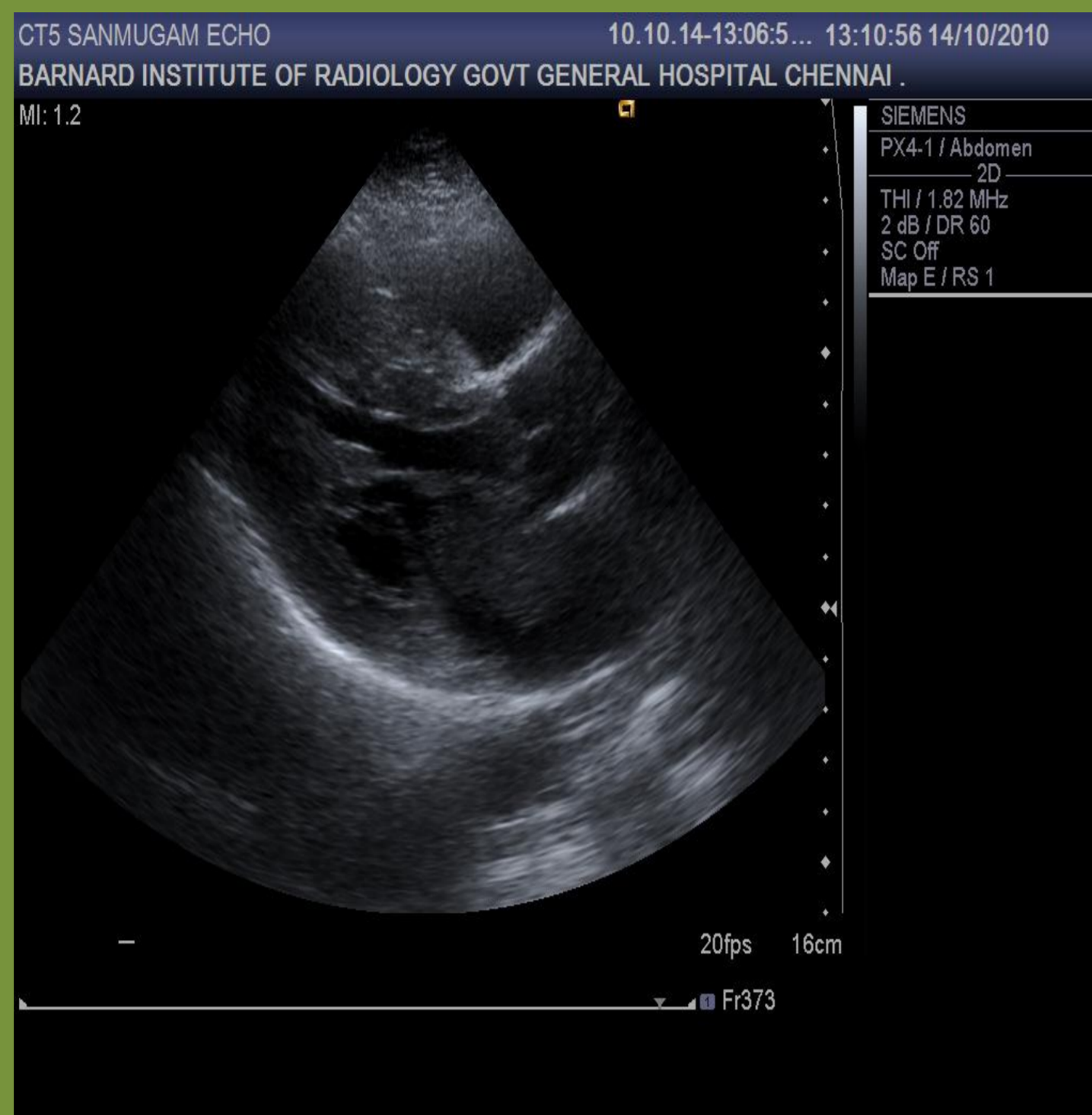
Co-authors:Dr.K.Vanitha,Dr.N.Kailasanathan,Dr.K.Malathy,Dr.S.Sundareswaran,Dr.S.Babu Peter, Dr.D.Ramesh, Dr.S.Kalpana,Dr.C.Amarnath,Dr.J.Devimeenal,Dr.E.Manimekala

BARNARD INSTITUTE OF RADIOLOGY, MADRAS MEDICAL COLLEGE, CHENNAI

A 63year old male presented with

- c/o left sided chest pain- 1 week,radiating to lt arm
- Dyspnoea grade 3
- Known Diabetic on drugs

ECHOCARDIOGRAM



- Echocardiogram:
- Mass in the left atrium attached to the interatrial septum which prolapses across the AV valve
- Systolic anterior motion of mitral valve leaflet

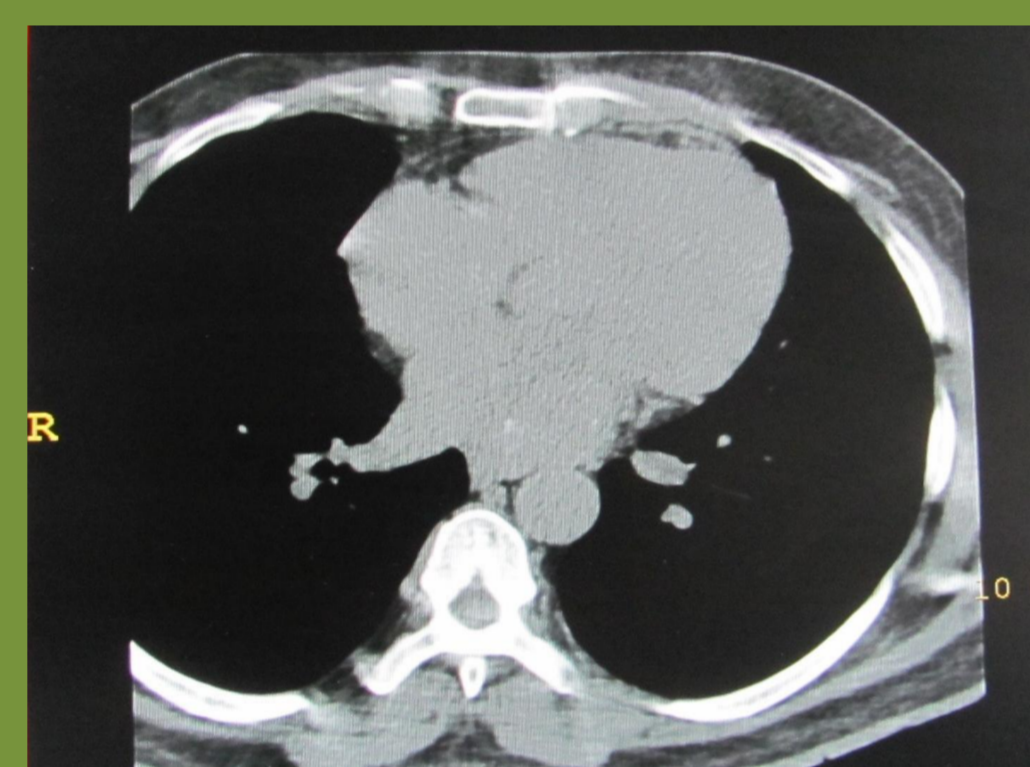
Differentiating CT features Myxoma

- Larger
- Low attn
- Heterogenous on CECT
- In or near fossa ovalis
- May prolapse into the ventricles

Thrombus

- Smaller
- Higher attn
- Homogenous on CECT
- In the posterior or lateral wall of atrium

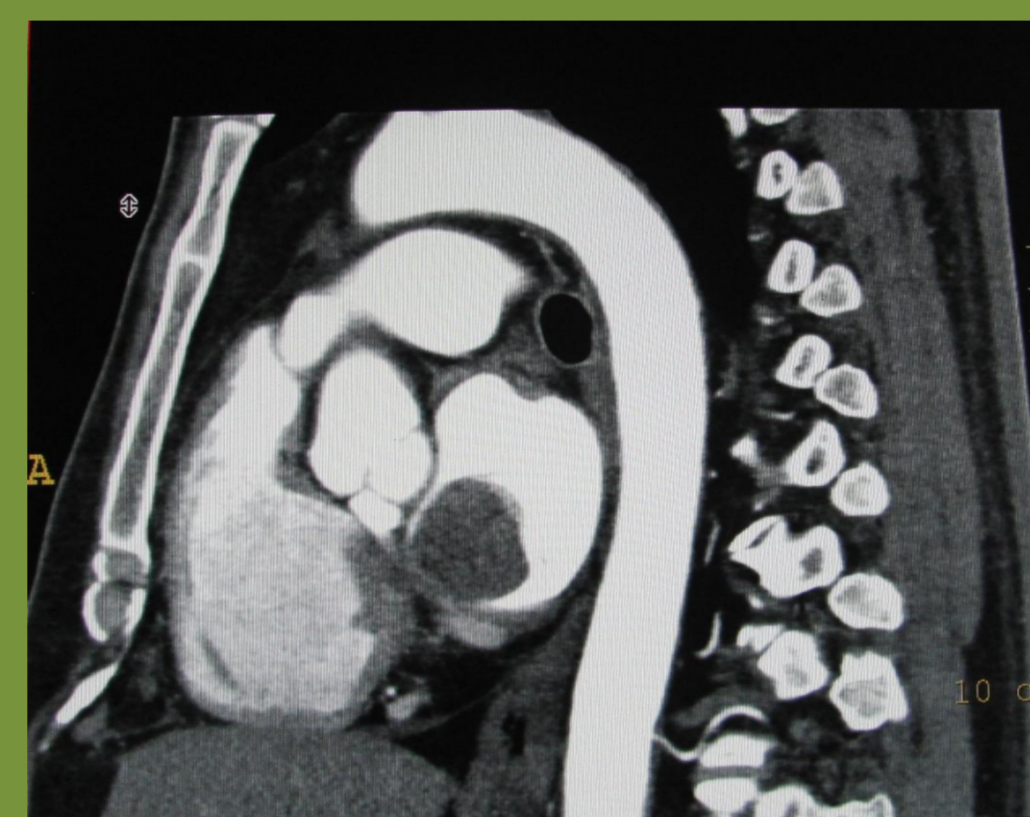
Plain CT-axial



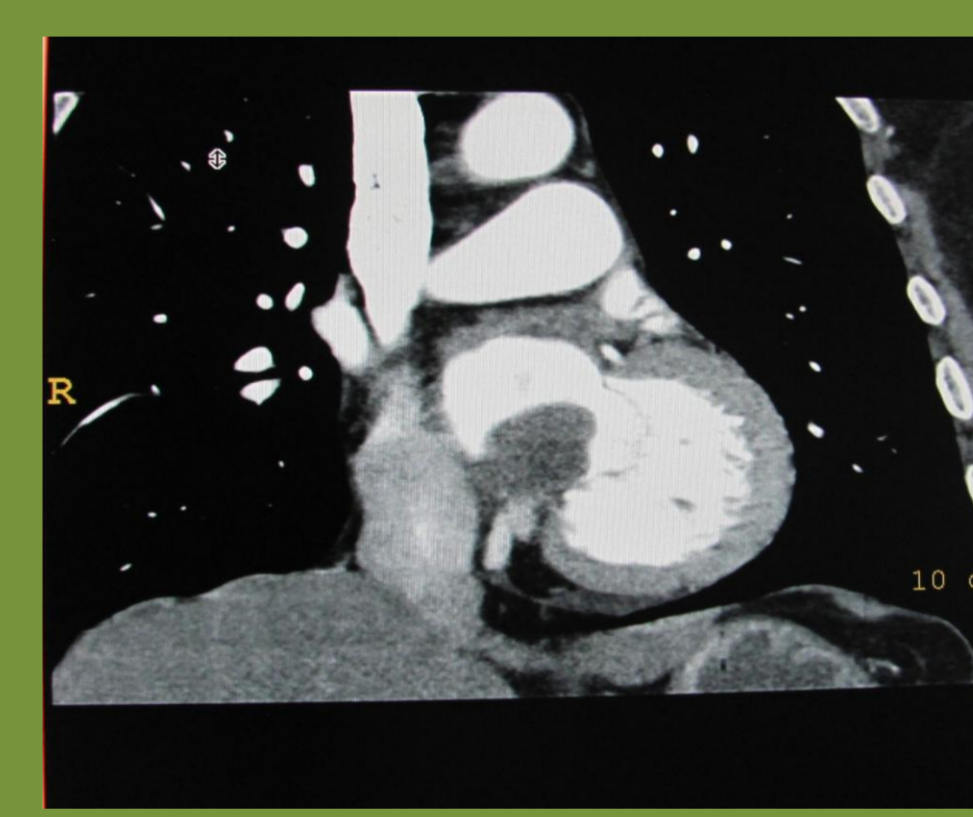
CECT-axial



CECT-sagittal



CECT-coronal



Differentiating MRI features Myxoma

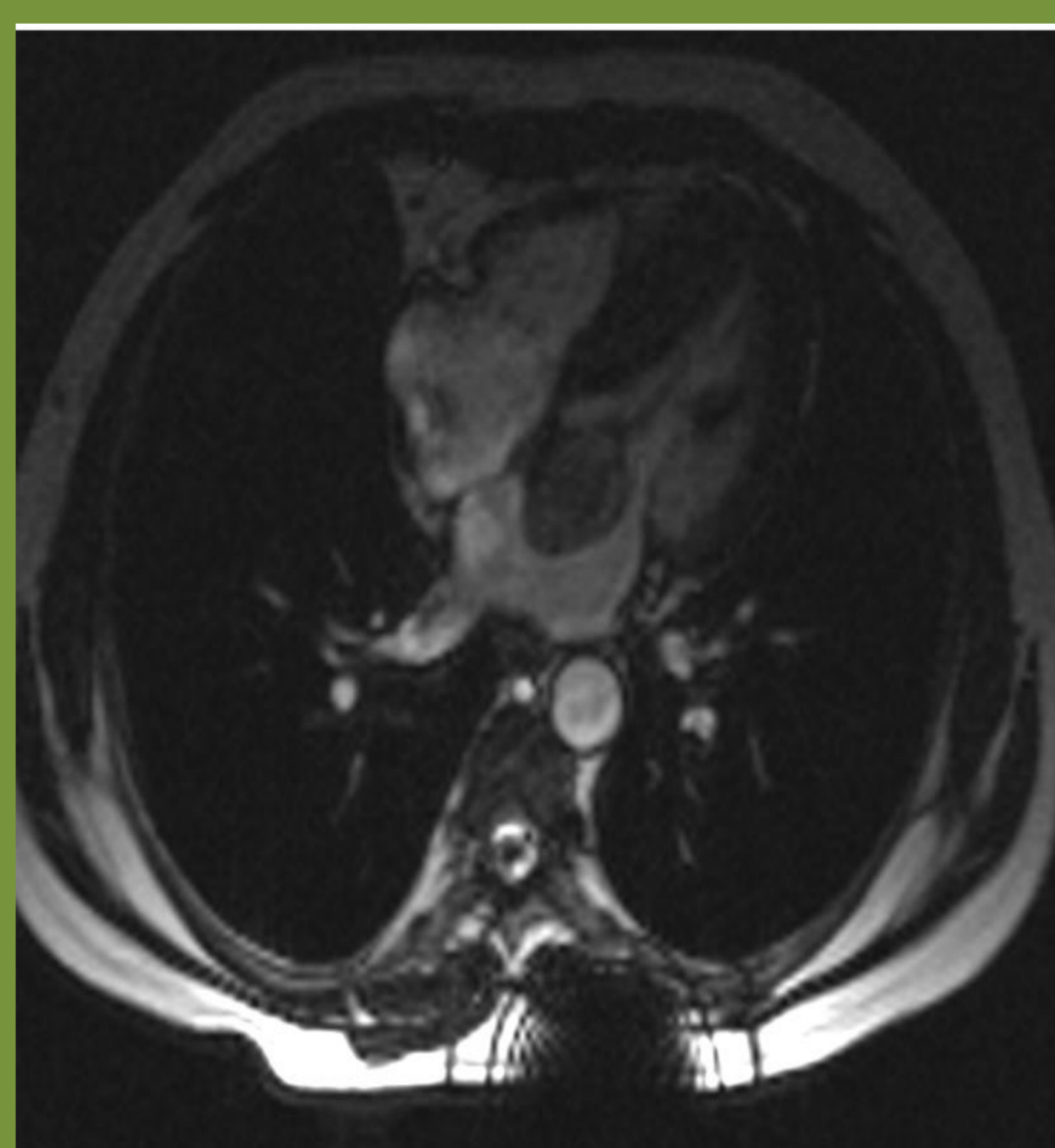
- Solitary
- SSFP-hyper
- Cine-pedunculated may prolapse into ventricle
- Heterogenous contrast enhancement post contrast

Thrombus

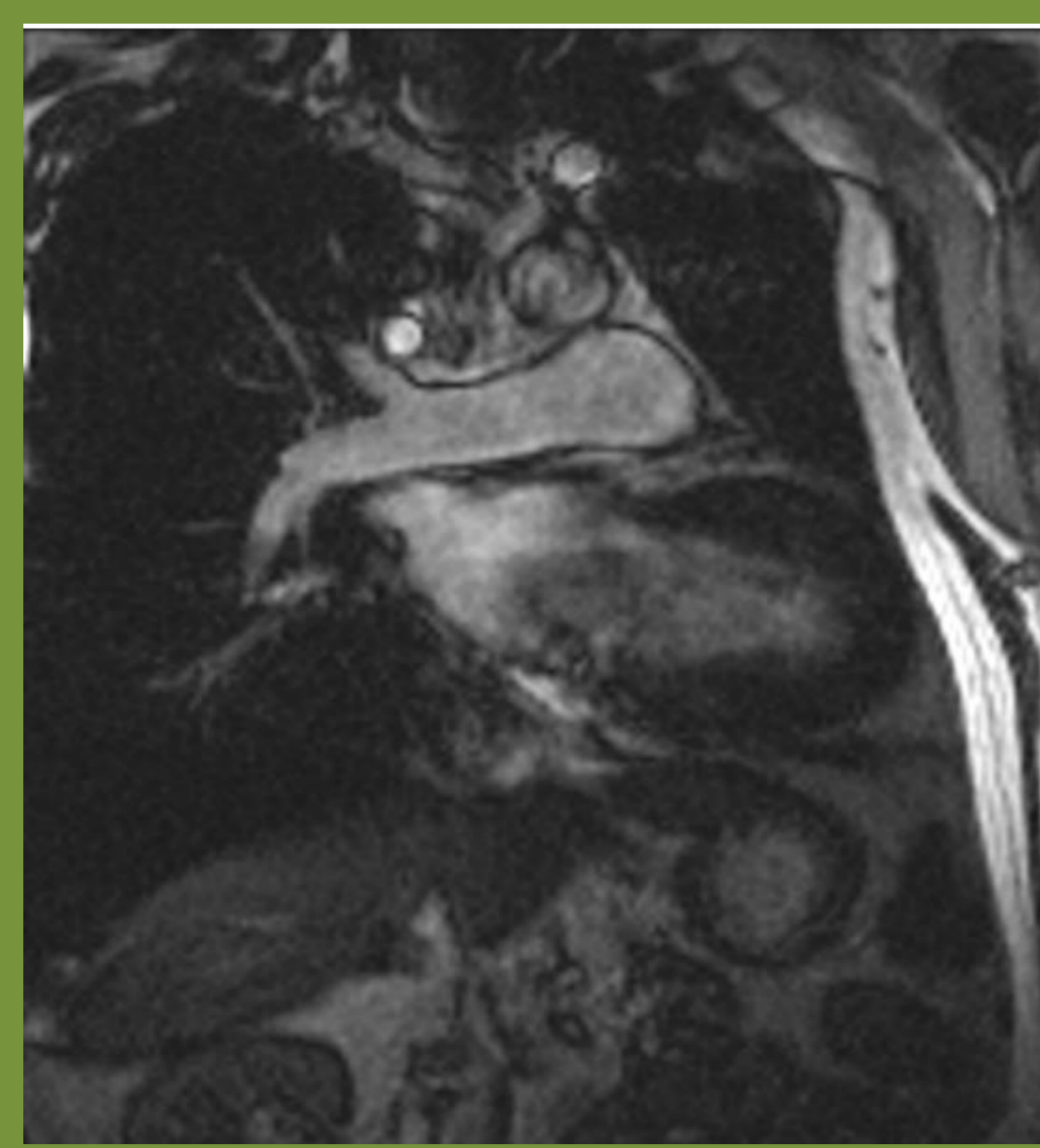
- Layered
- SSFP-iso to hypointense
- Cine-akinetic
- No or mild contrast enhancement on post contrast images

CT-isodense mass in the left atrium, attached to the IAS. On contrast shows no enhancement
MRI-T1 iso/ T2 hyper intense lesion ,not suppressed in STIR in the left atrium attached to IAS.on cine GRE images, the mass prolapses across the AV valve into ventricle. Contrast-Heterogenous enhancement.

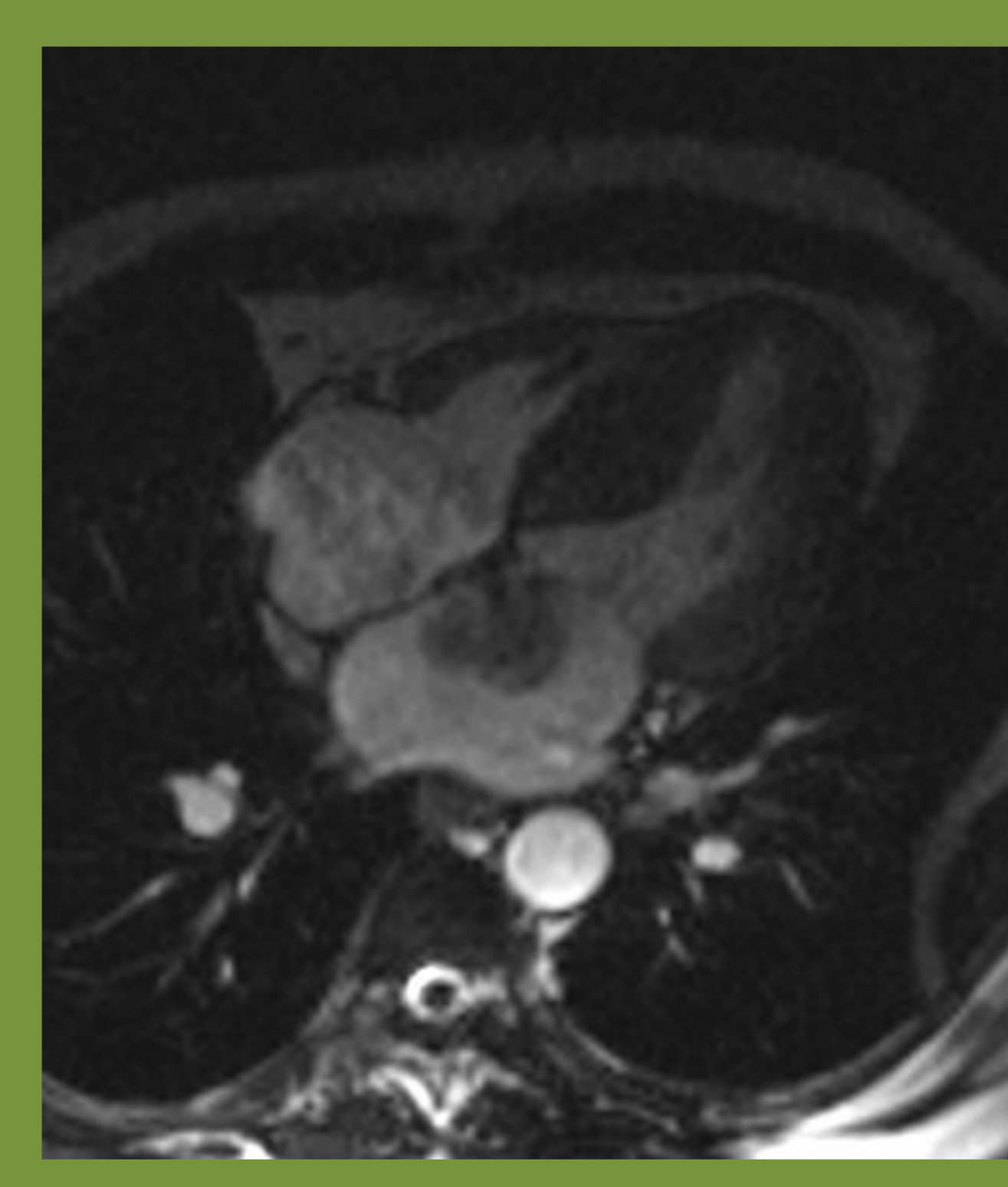
T1 axial



Cine GRE coronal



Post contrast



MRI is more sensitive than CT for differentiating myxoma from thrombus
Cine MR GRE images are the best which demonstrate mobility in case of myxoma

References:

Scheffel H, Baumuller S, Stolzmann P, Leschka S, Plass A, Alkadhi H, Schertler T. Atrial Myxomas and Thrombi: Comparison of Imaging Features on CT. AJR 2009; 192:639-645
Greben ML, Rosado-de-Christenson ML, Green CE, Burke AP, Galvin JR. Cardiac myxoma: imaging features in 83 patients.

RadioGraphics 2002; 22(3):673-689