The 44th Annual International Congress of the
EGYPTIAN SOCIETY OF
CARDIOLOGY
CardioEgypt2017

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Post CABG heart failure

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History

- Male patient 50 years old from Assiut, married with two off-springs with no special habits.
- His father died from cardiac disease.
- The patient is known to be HTN on treatment (Amlodipine, bisoprolol and irbesartan) but not DM.
- The patient presented to us is complaining of progressive dyspnea of 3 months associated with cough and expectoration of whitish sputum.

- The condition started from one year he was complaining of exertional dyspnea and after seeking medical advise coronary angiography was done at August 2015 and revealed coronary artery disease for PCI.
- Then he underwent PCI with two stents at September 2015 and after one month only the symptoms started again so new coronary angiography done at Novemeber 2015 and revealed the need for CABG

- December 2015 : CABG was done complicated with CVS at the time of the operation but the patient recovered with minimal residual neurological deficits, the symptoms completely relieved, he returned to work again and until the recent complaints he was well and good.

- Recently he started to complain of progressive dyspnea, orthopnea, paroxysmal nocturnal dyspnea and bilateral lower limb edema of 3 months.

- Associated with cough and expectoration of the same period.

Examination

❑ General examination

- Mental state and decubitus:

  The patient was alert, conscious but orthopneic.
- Body built: Average.
- Pallor
- Vital signs:

  I- Temperature: 37 c

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II- Blood pressure : 130/70 mmhg

III-Pulse :

-Rate: 100 bpm

-Rhythm: regular

-Volume: big

-Special character: collapsing

-Peripheral pulsations: palpable peripheral pulsations.

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- Head and neck:
  --Inspection and palpation:
    -Exaggerated carotid pulsations (corrigan's sign)
    -Raised JVP about 7 cm above sternal angle.

- Upper and lower limbs:
  -Bilateral pitting ankle oedema.
- Peripheral arterial pulsations:
  -Pistol shots.
  -Duroziez's sign.

Auscultation of the chest:
  -Bilateral fine basal crepitations.

❑ **Other systems: Intact.**

❑ Local examination:

Inspection and palpation:

-Apex:

In the 6th intercostal space just outside the mid-clavicular line, localized, illsustained and forcible.

-- Auscultation of the heart:

-Heart sounds:

1st HS muffled.

2nd HS normal.

No additional sounds.

-Grade III pan systolic murmur on the Mitral area.

-Early diastolic murmur on 2nd Aortic area.

-Ejection systolic on Pulmonary area.

Differential diagnosis

1. Graft failure with (dyspnea as angina equivilant)
2. Ischemic cardiomyopathy
3. Aortic dissection

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Investigations

Electrolytes and renal function was Normal but

ESR	1st hr= 59mm
CRP	84 mg/l
Rf	-ve

CBC and LFT was normal except of mildly elevated liver enzymes

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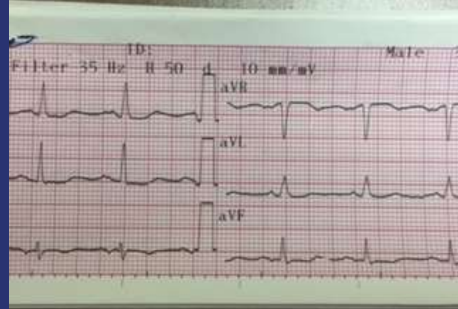
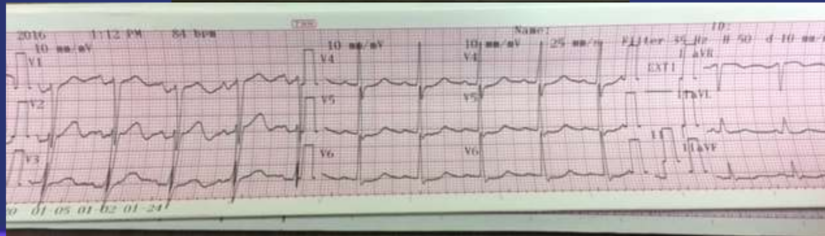
❑ ECG





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❑ 1st Echo:

- Severe AR (single central jet occuping the whole LVOT).
- Severe MR(single eccenteric jet swirling in the LA).
- Severe TR with estimated PASP=95 mmhg.
- Dilated RA,LA=5.8 cm and LV.
- EF=65% by m mode and 55% by eyeball.
- Good RV systolic function, TAPSE=18 mmhg.

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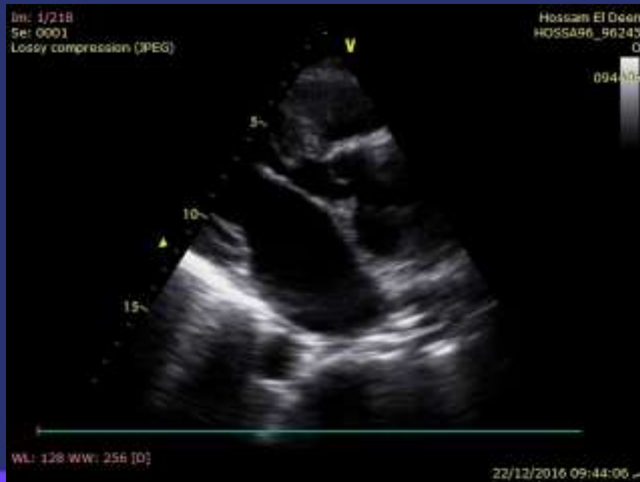
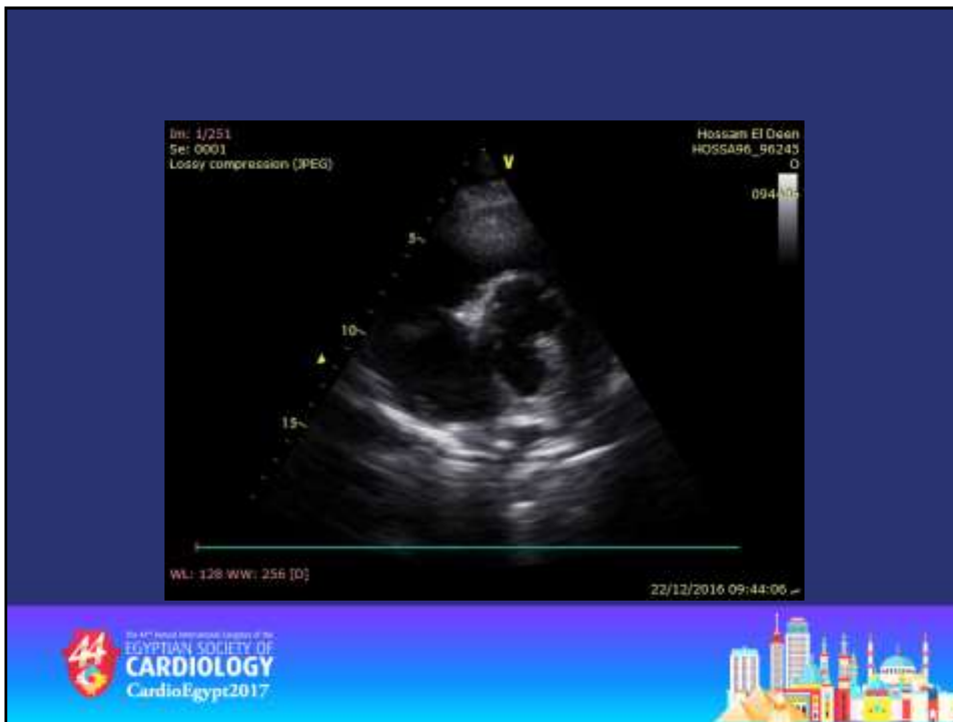
Echo at our center (two weeks later)

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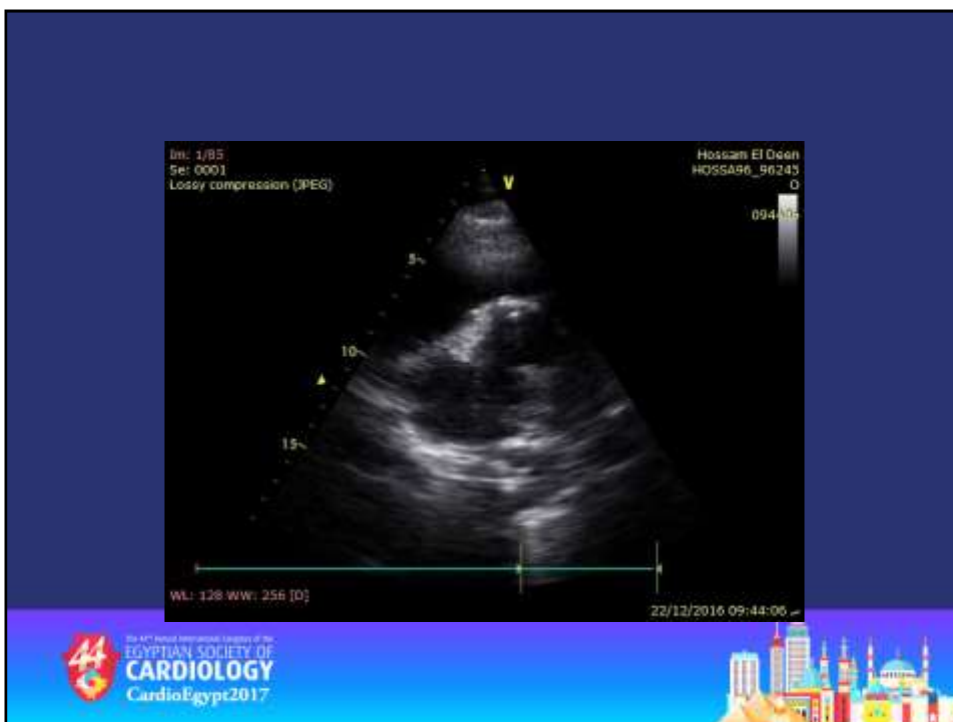
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❑ TEE: At 22/12/2016.

-Severe MR , Severe AR.

-Para-valvular aortic abscess rupturing into the ascending aorta (pseudo-aneurysm) with two vegetations seen at the aortic root level.

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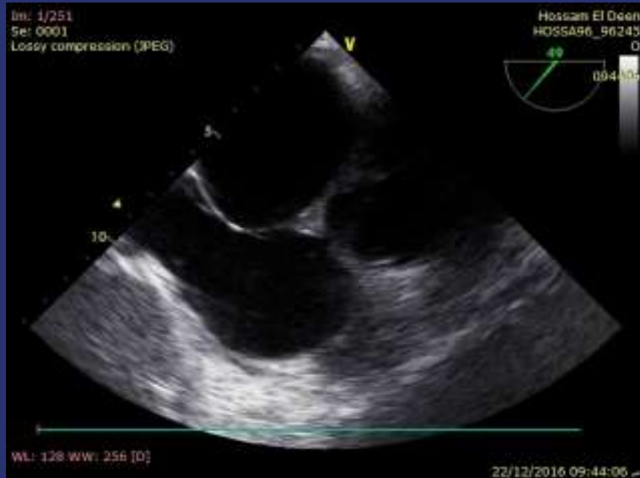

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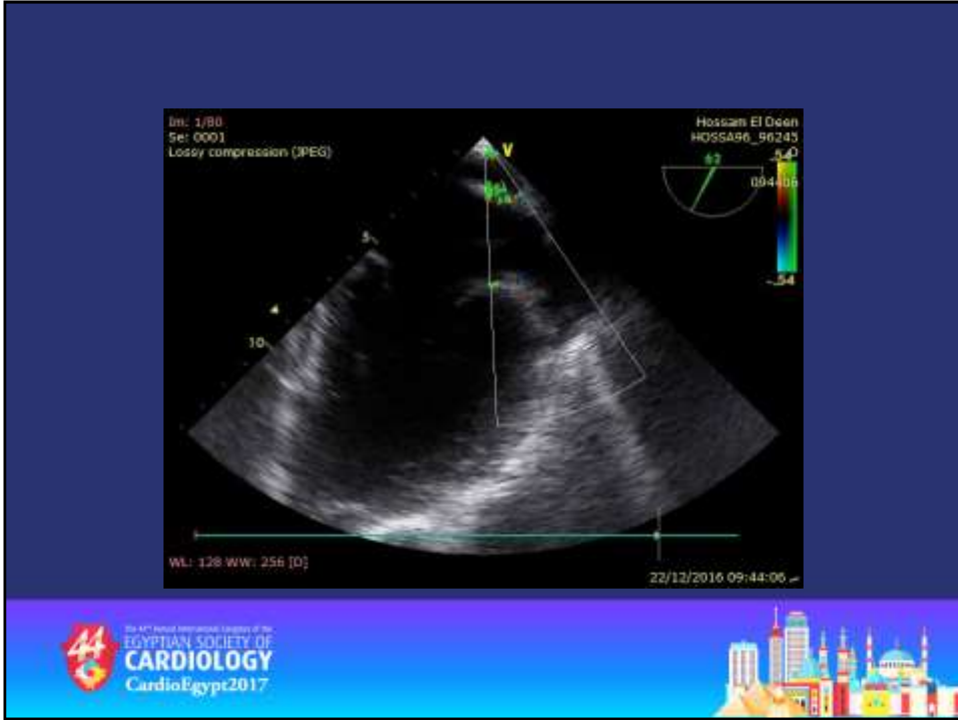
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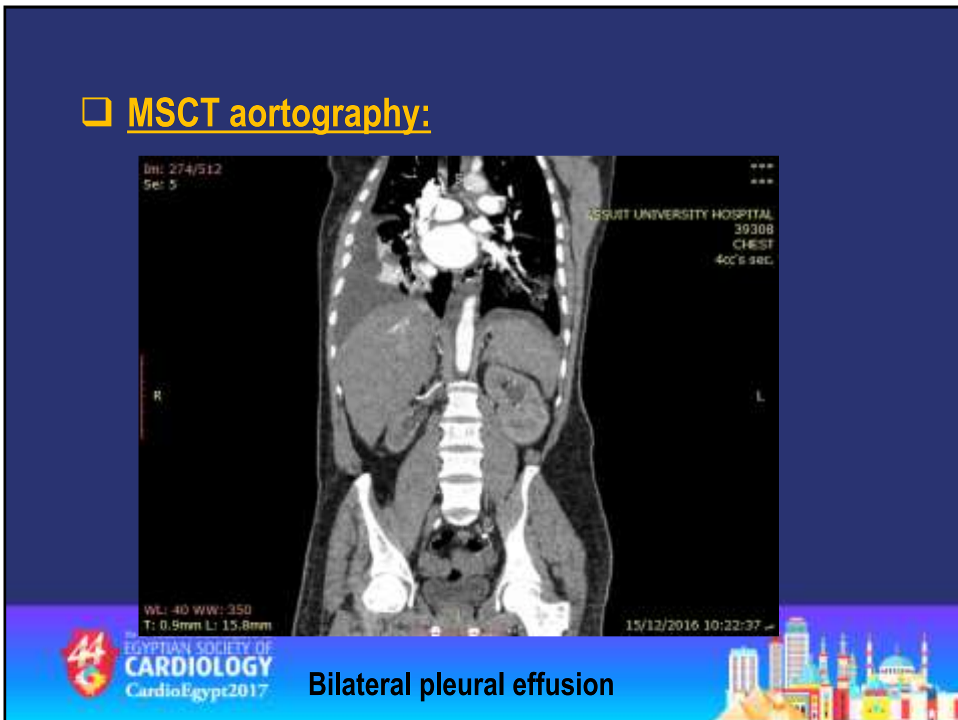
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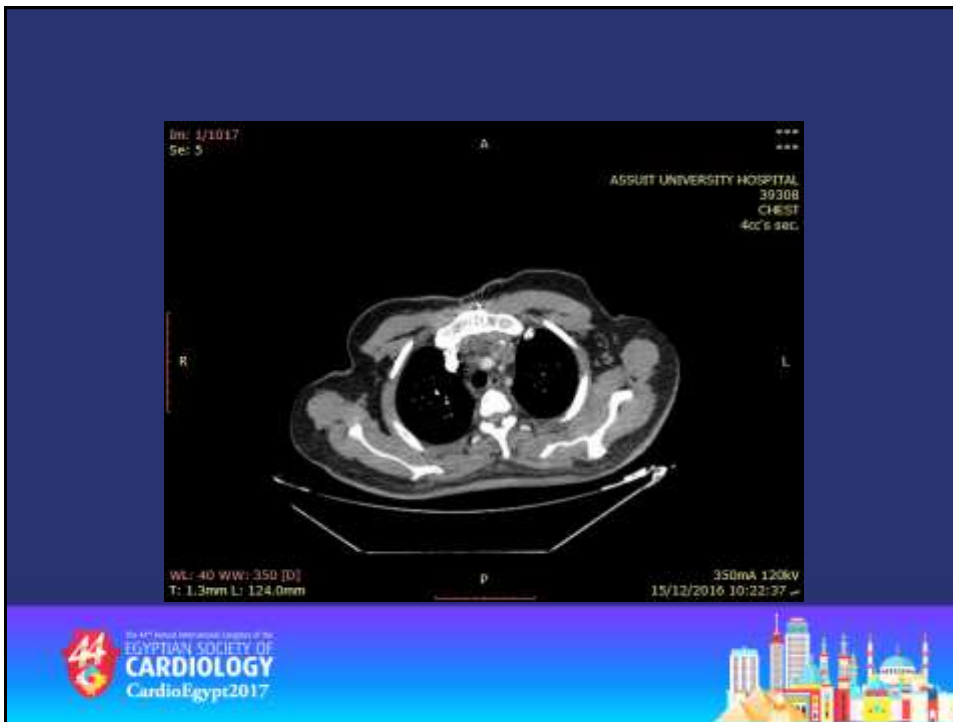
Bilateral pleural effusion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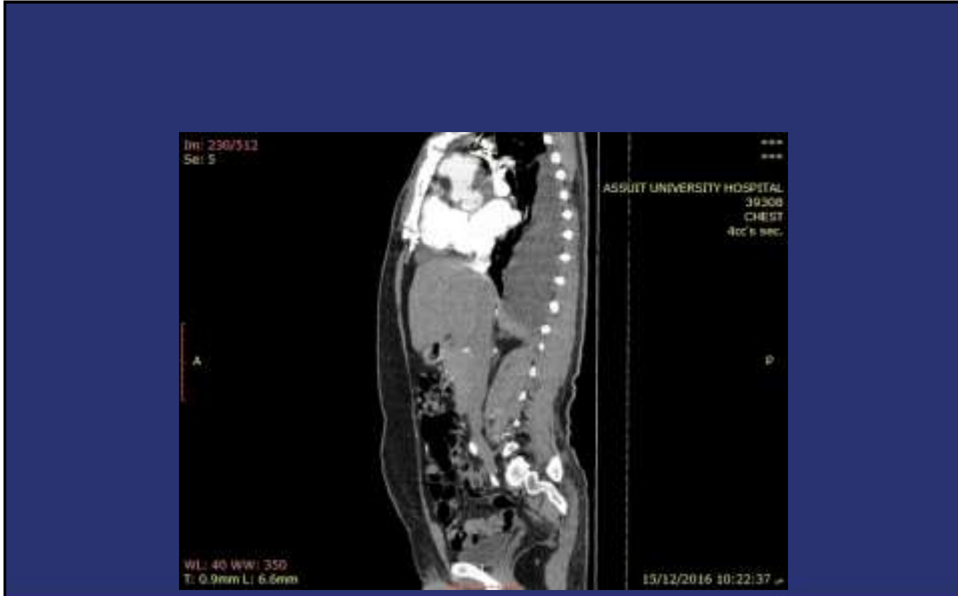
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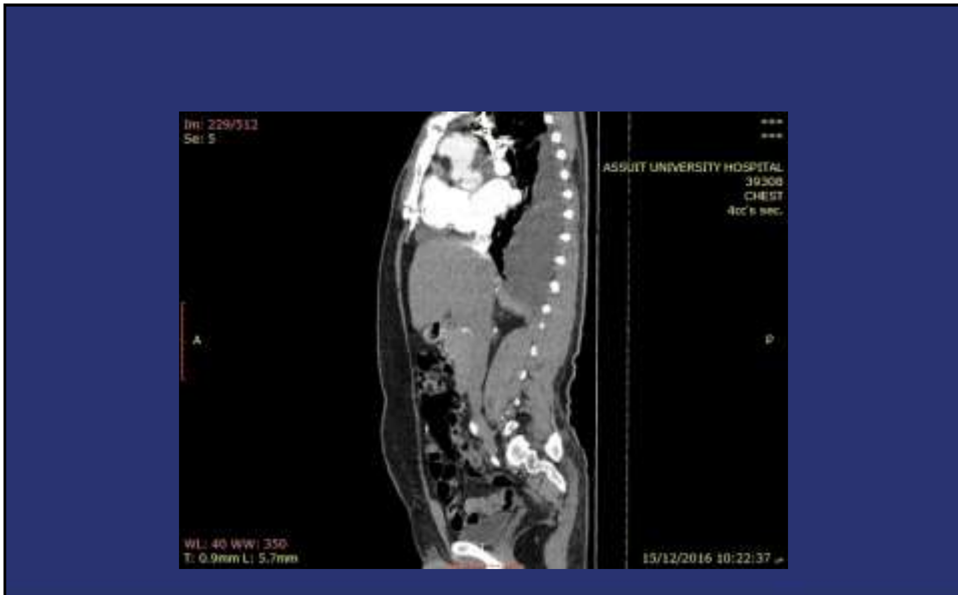
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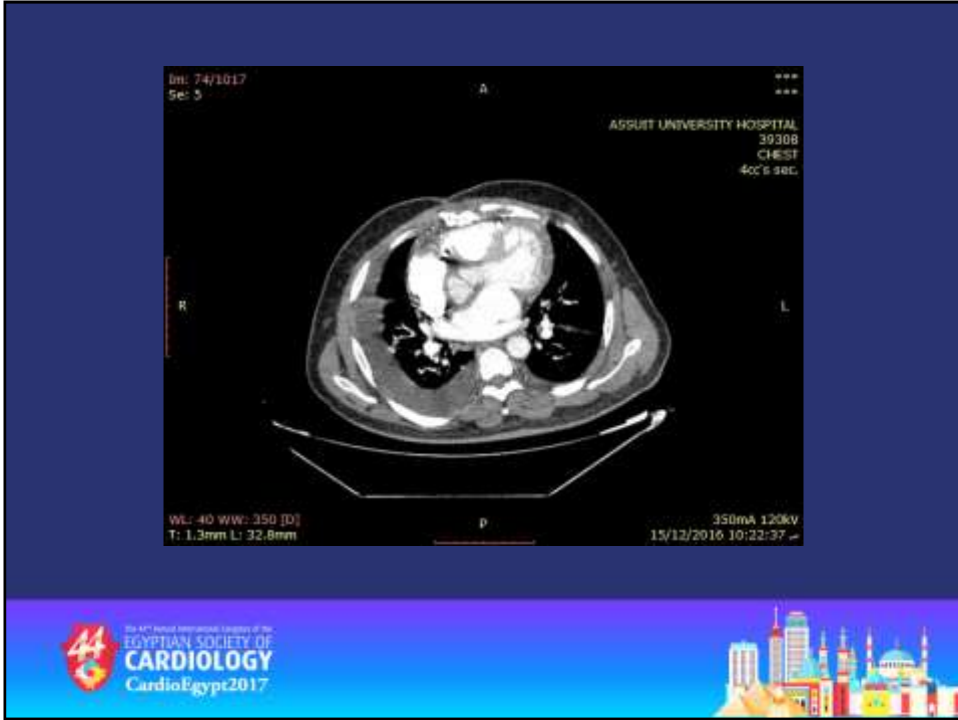

Vegetations

Diagnosis

- Paravalvular abscess that ruptures and now communicating with the aortic root.
- Ascending aorta localized aneurysm
- Vegetations attached to aortic wall
- Severe AR, severe MR.

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- Infective endocarditis complicated by aortic root abscess.
- While being prepared for surgery, the patient died after having rising chemistry , uncontrolled heart failure and severe hypotension.

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Discussion

- Upto Our knowledge this is the first reported post CABG infective endocarditis.
- IE in our case complicated not only by paravalvular abscess but also with aortic wall aneurysm.
- Management is dilemma in this condition, coronary angiography and aortic root replacement is indicated.

- Post CABG infective endocarditis may complicate inadequate clean surgical field, inspite of occurring late in our case.
- Prophylaxis against IE is not indicated post or pre CABG in guidelines since 1998, because of low/no risk, but here an alarm is raised to be cautious.

Thank you