

# Meeting the unexpected

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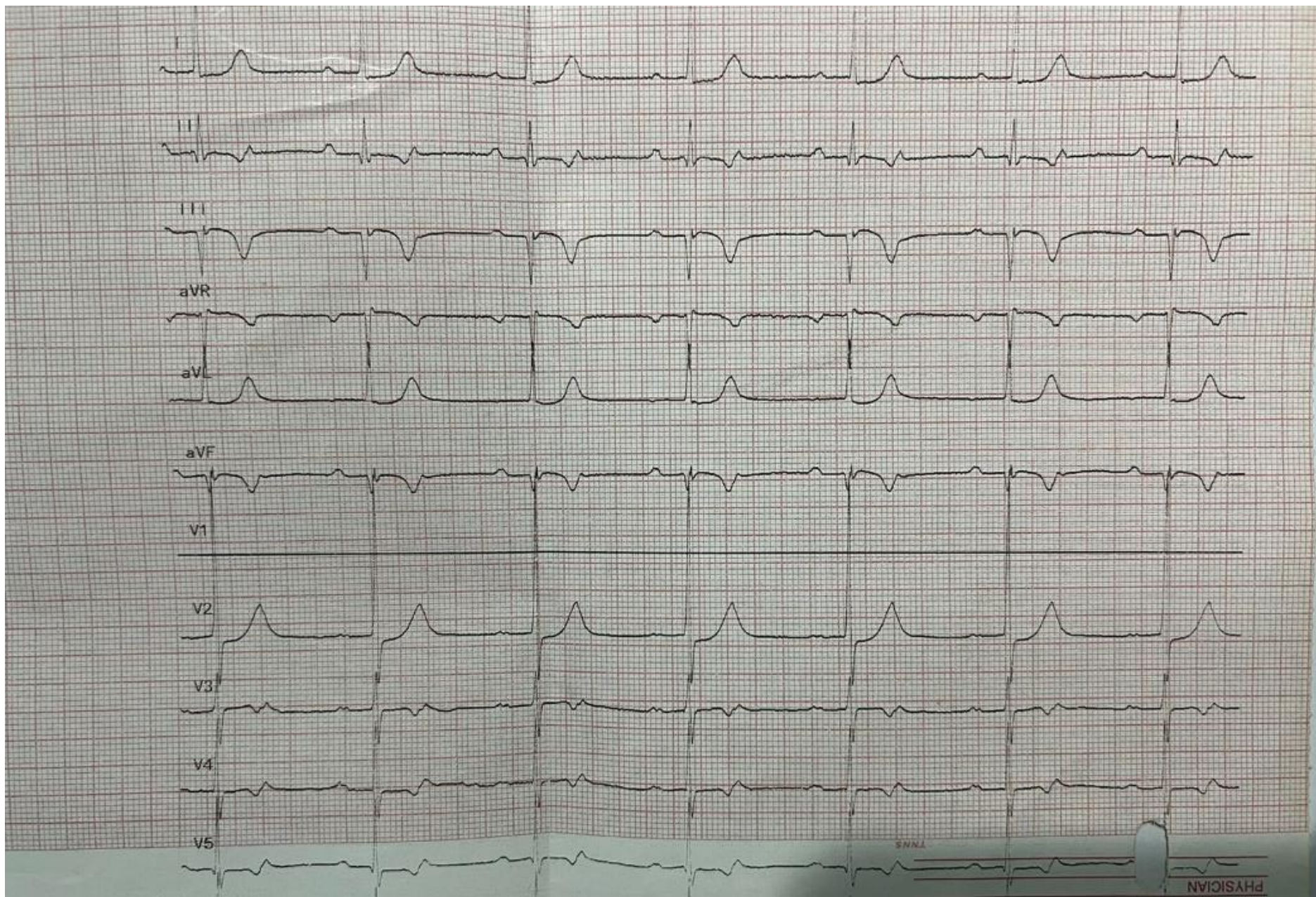
- **52 year old male patient**
- **Smoker**
- **Uncontrolled diabetes**
- **History of ACS 4 months before presentation : 2 DES in RCA**

- **Recurrent attacks of fever**
  - **Admitted 2 times with the diagnosis of chest infection**
  - **Received antibiotics**
  - **All available echocardiographic studies at this period : Normal**
- **2 weeks before presentation**
  - **Fever recurred**
  - **HF manifestations : Shortness of breath , orthopnoea and LL oedema**

# Presentation

- Orthopnic
- Fevereish
- BP = 120/70 mmHg , HR = 70 Bpm ( on BB)
- RR 30 cycles / min , O2 saturation on RA = 90 %
- Pan-systolic murmur over the apex radiating to the axilla
- Bilateral fine crepitation's up-to mid lung zone
- Janeway lesion ( right big toe )

# ECG on Presentation



- **Laboratory parameters**
  - **High inflammatory parameters**
    - TLC was 15.6 (  $10^3$  / cmm ,
    - CRP 160 mg / dl
    - PCT 11.7
  - **Rising creatinine level ( 3 mg/dl )**
- **Echocardiography upon admission**
  - **Normal LV dimensions and function**
  - **No RWMA**
  - **Moderate mitral regurgitation ( with no related masses )**

# Possible Diagnosis

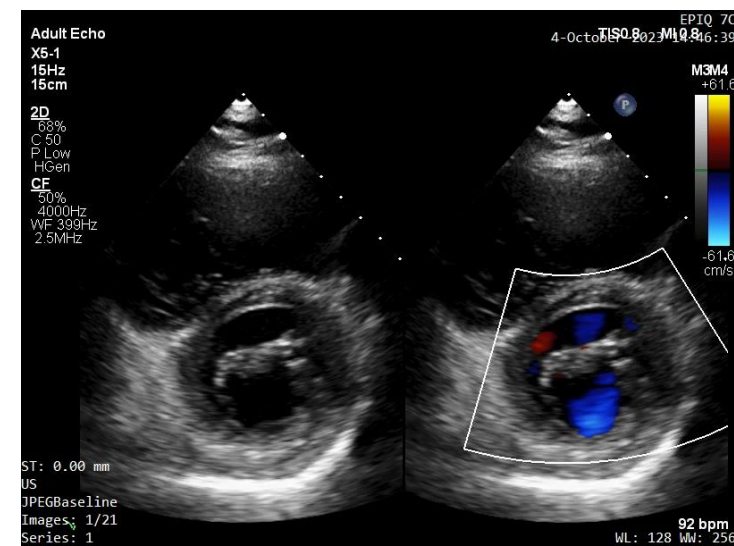
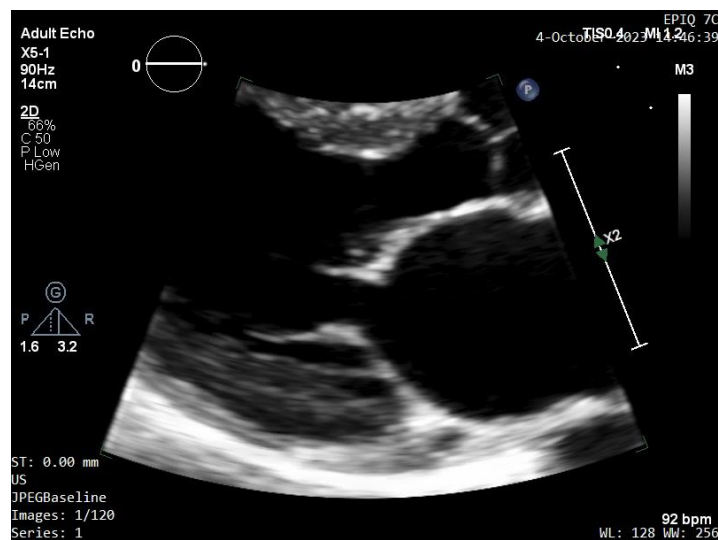
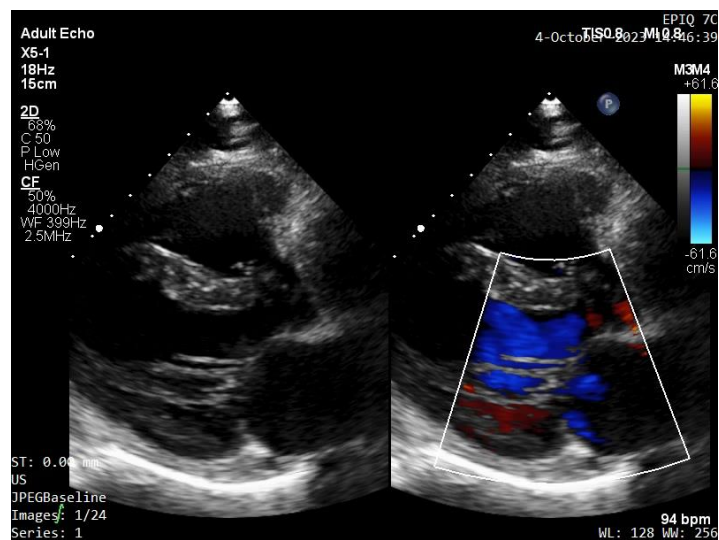
- **New valvular regurgitation**
- **Fever > 38 C**
- **Janeway lesions**

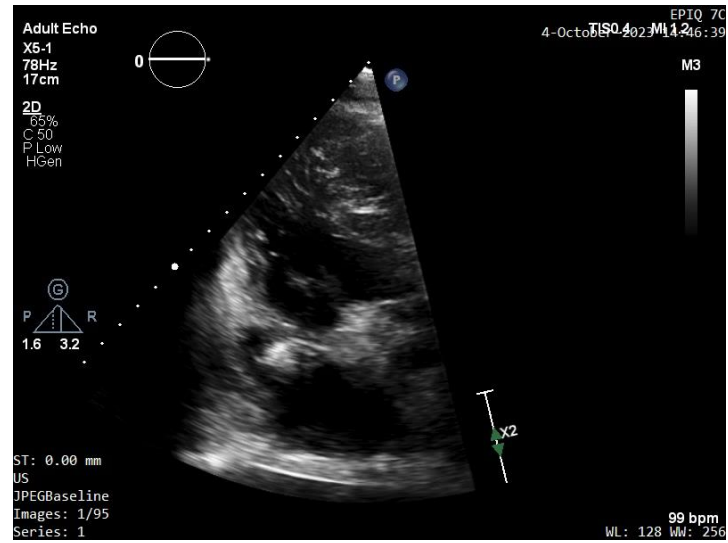
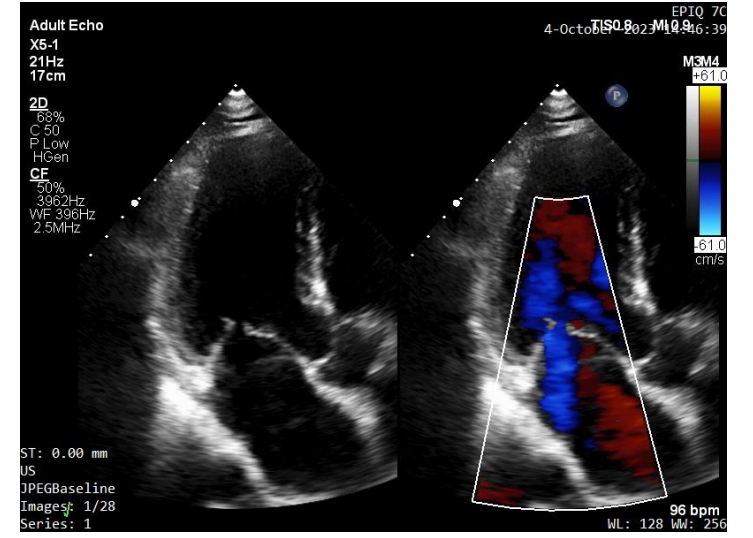
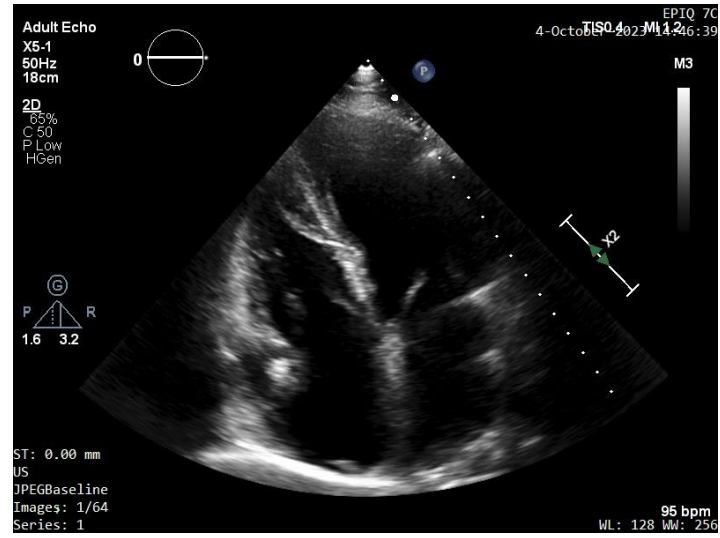
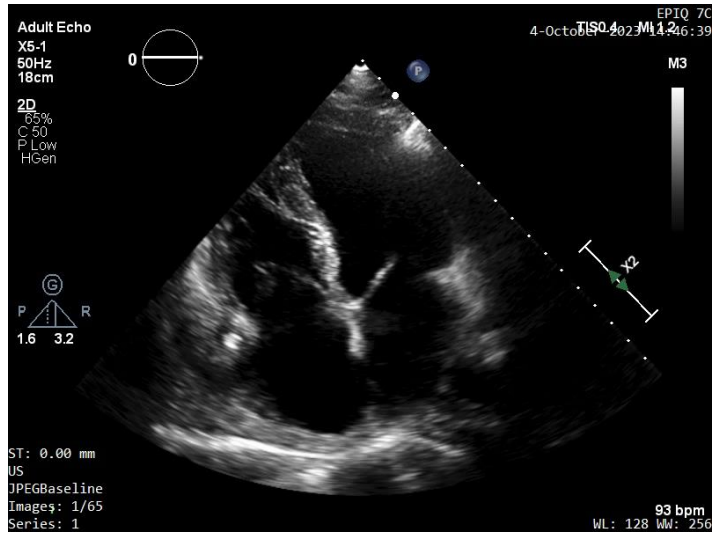
# Hospital course

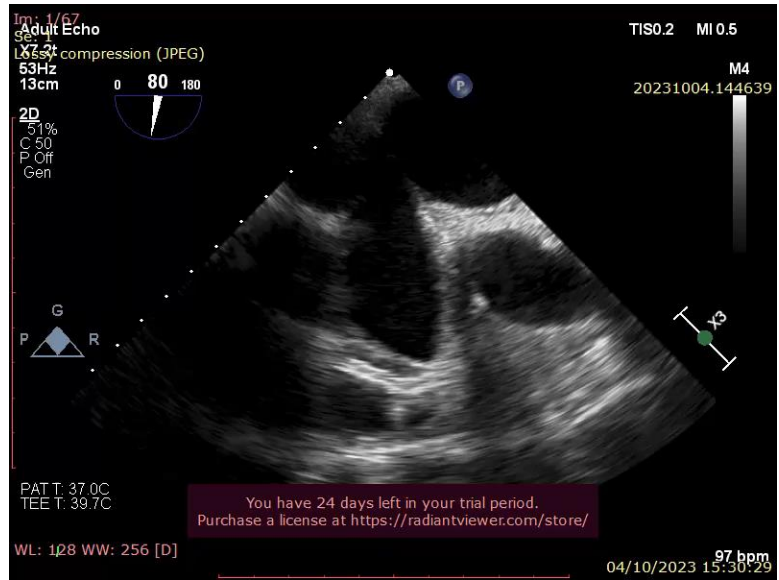
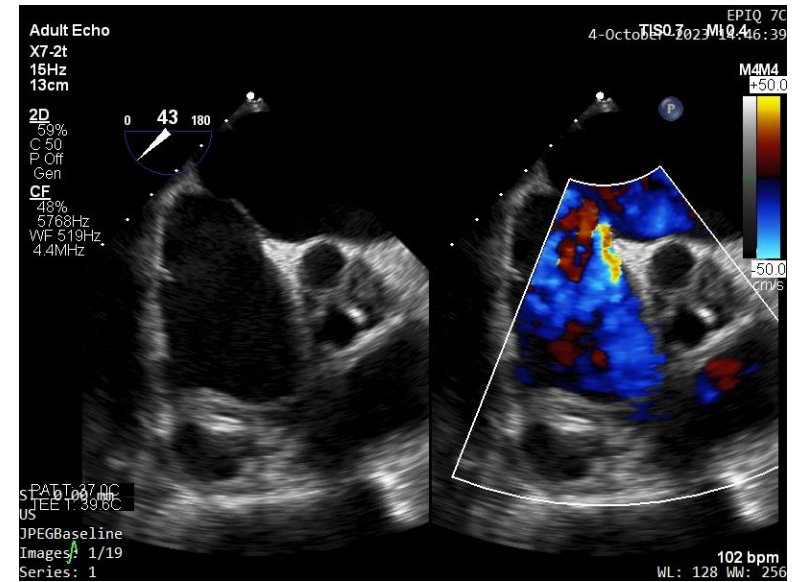
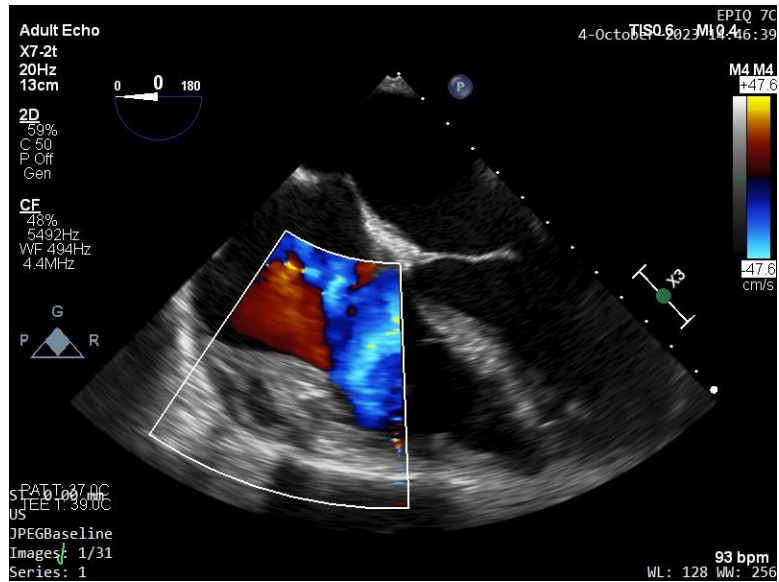
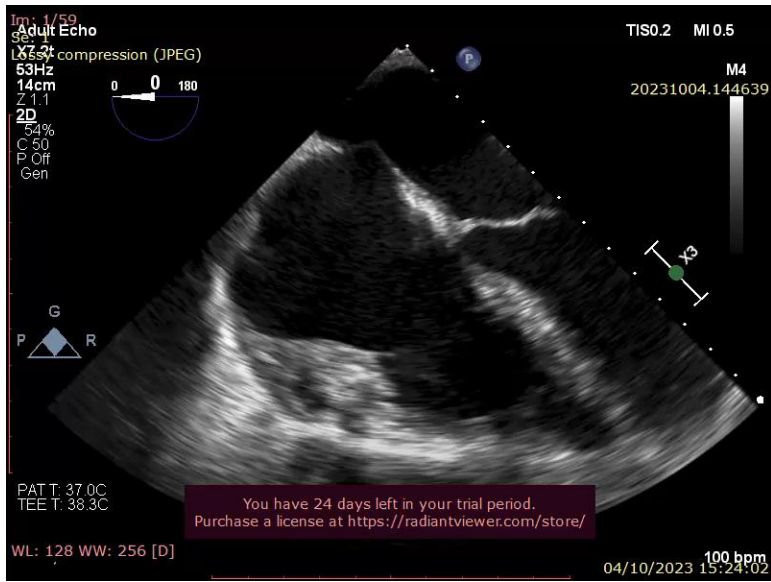
- Started Diuretic therapy and iV nitrates : improved his HF condition
- Routine workup
  - Blood cultures withdraw and started antibiotics inform of vancomycin, Gentamicin and Ciprofloxacin
  - Urine and sputum cultures
  - Proceed to TOE
  - Serology
  - Fundus examination
  - Abdominal Ultrasound



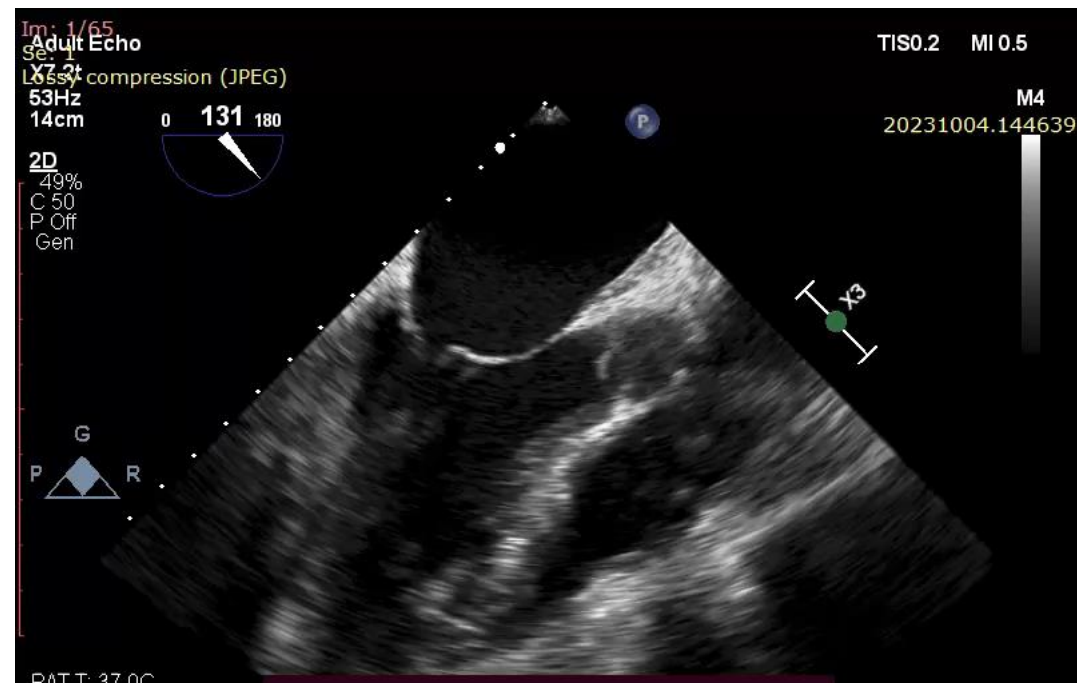
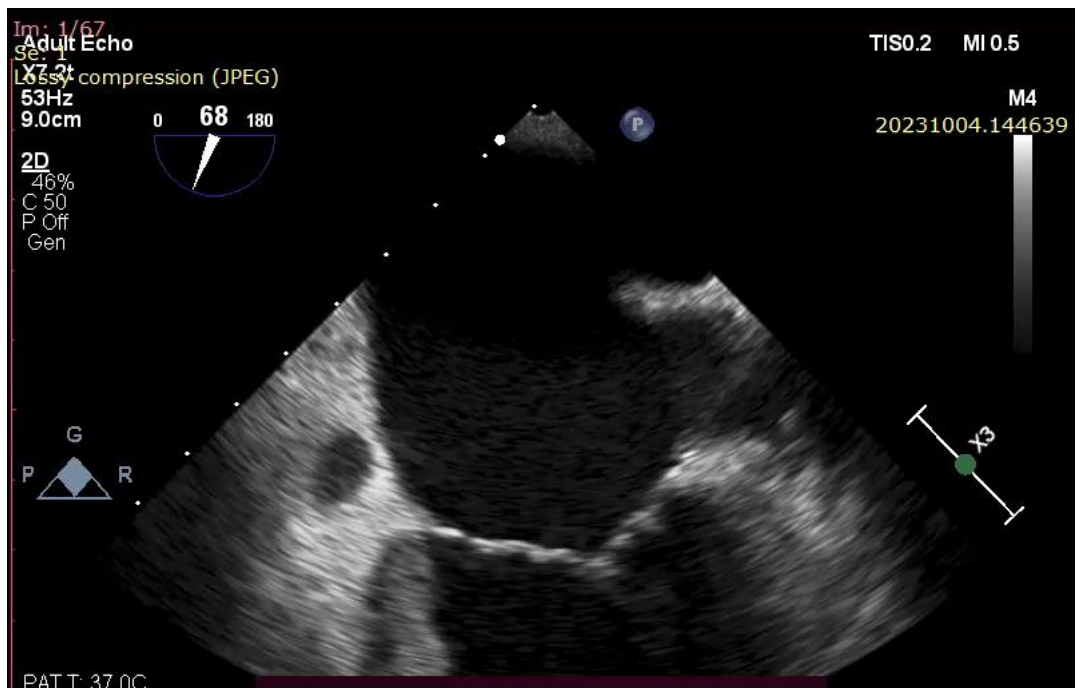
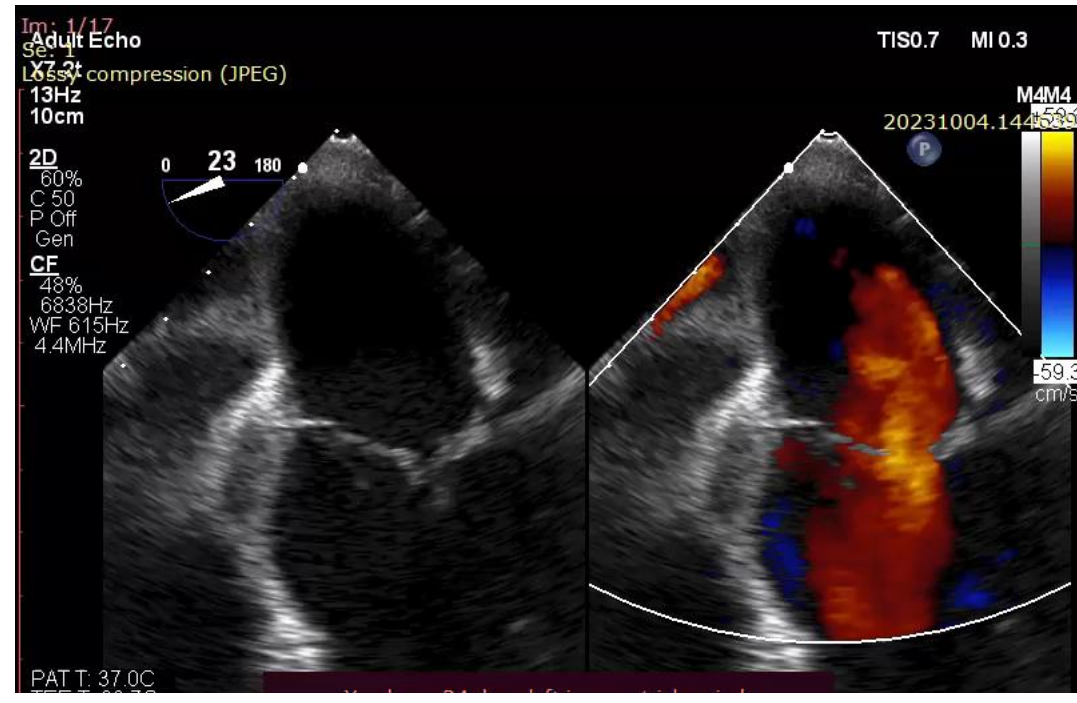
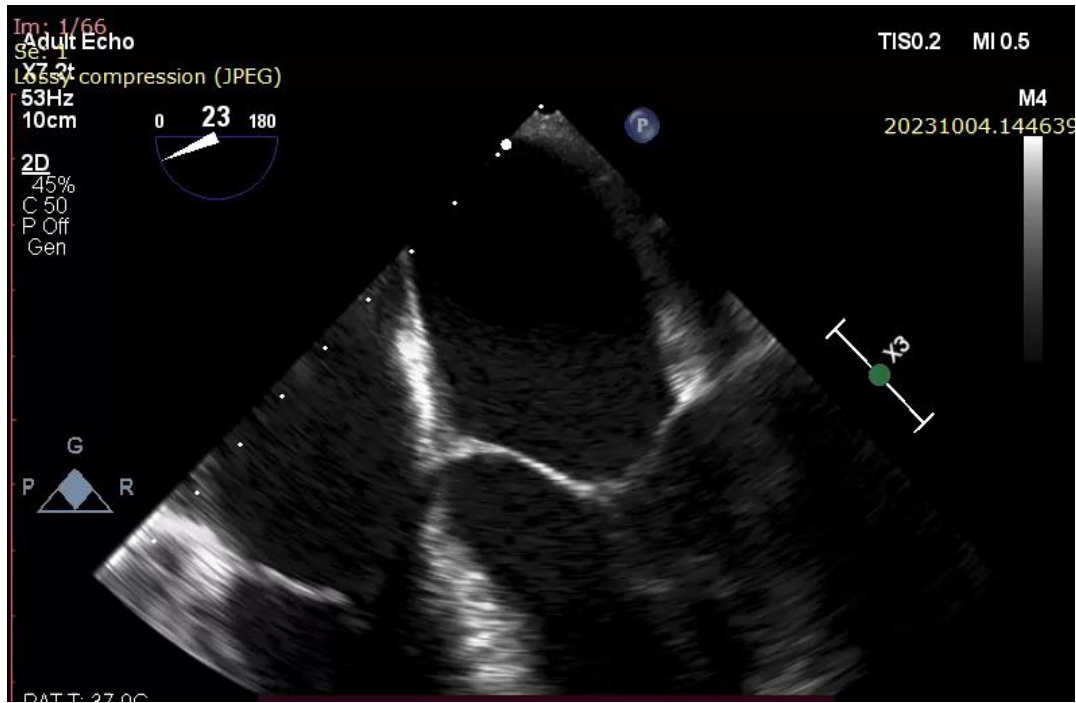
# Echocardiography











# What's Next ?

- **HF improved and we step down to oral diuretic**
- **Continue collecting the results of our work up**
- **Confirming the nature of this cavity**

- **Blood and sputum cultures came out showing Pseudomonas**

**aeruginosa : added Imipenem/Cilastatin**

- **No fever spikes and improvement in his inflammatory parameters**
- **Results of MRA came out free**
- **FDG- PET/CT ( hyper-glycemia )**



# FDG-PET CT- scan ( Negative )



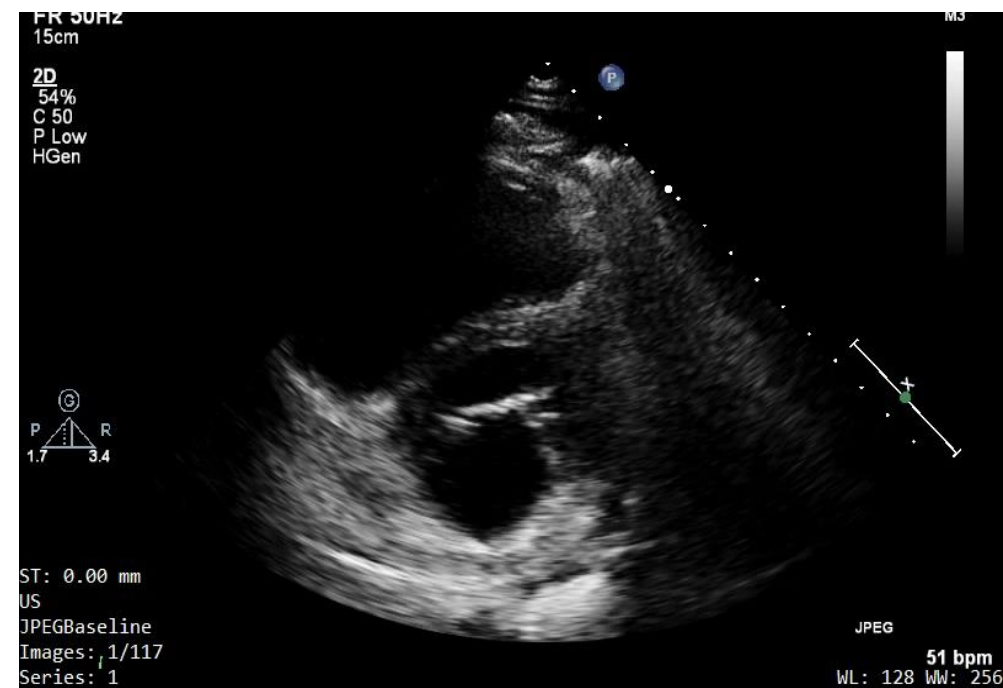
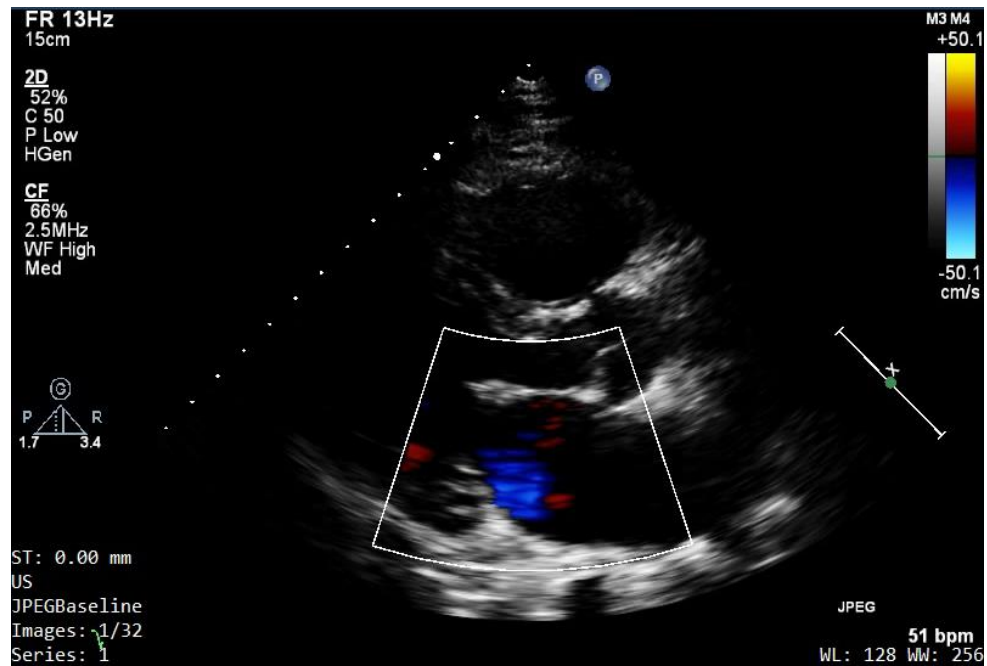
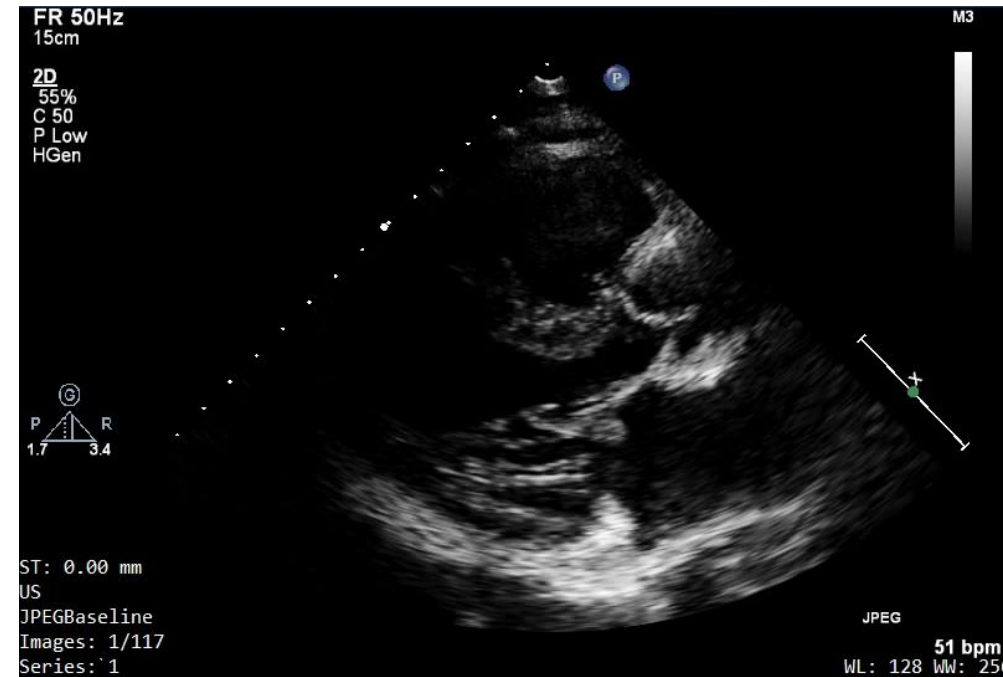
# FDG-PET CT- scan ( Negative )

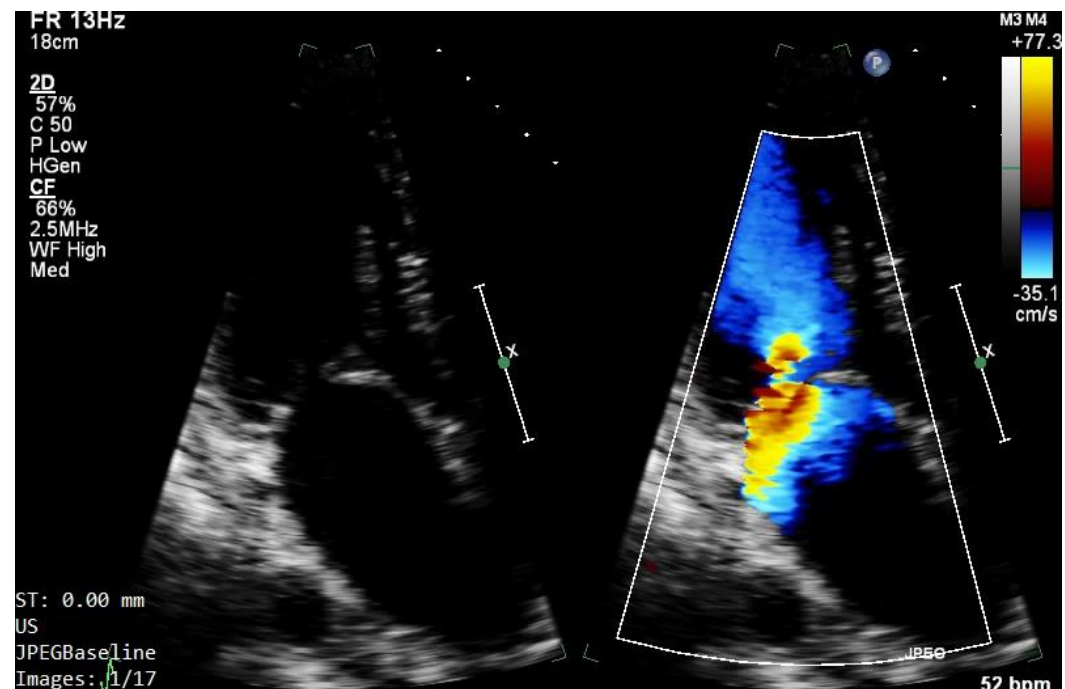
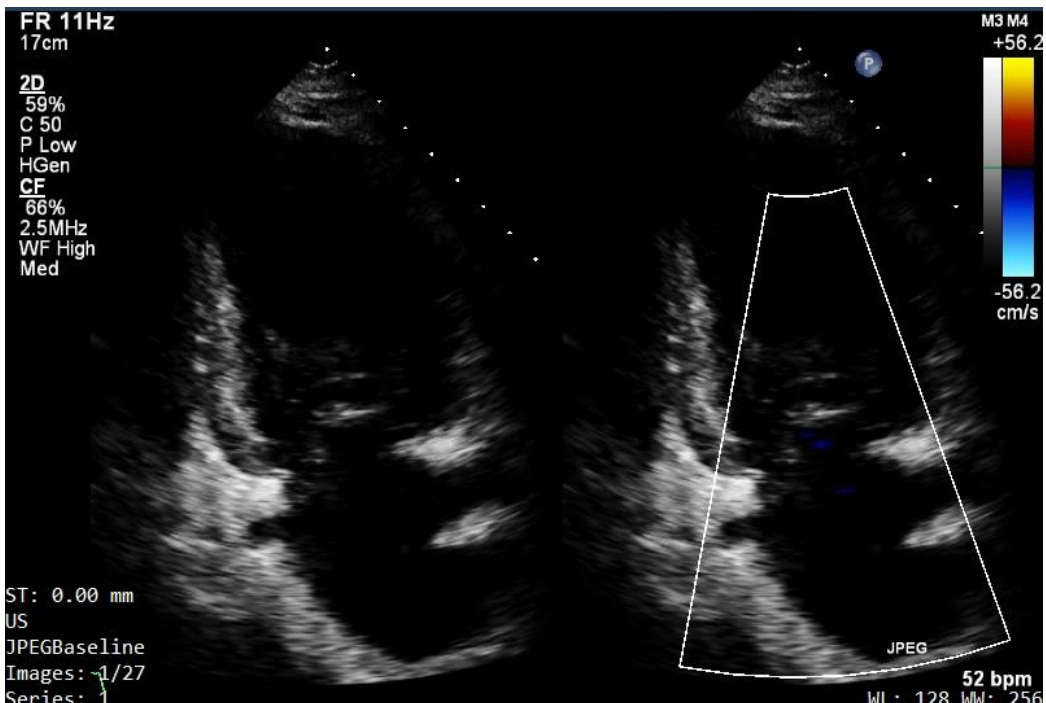
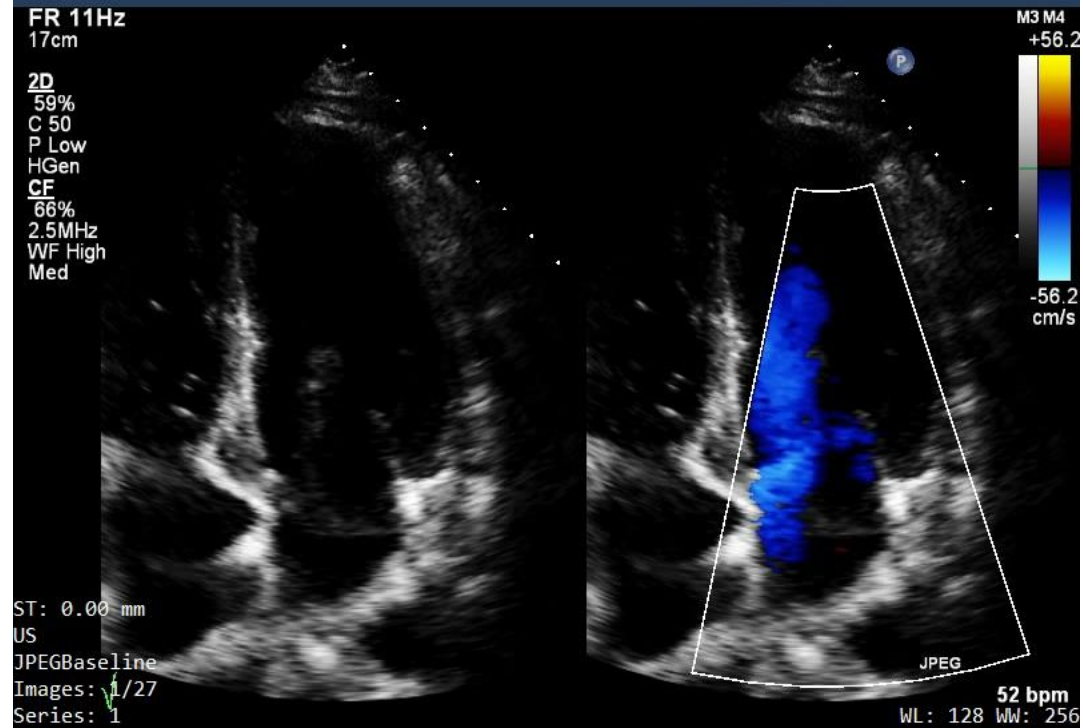
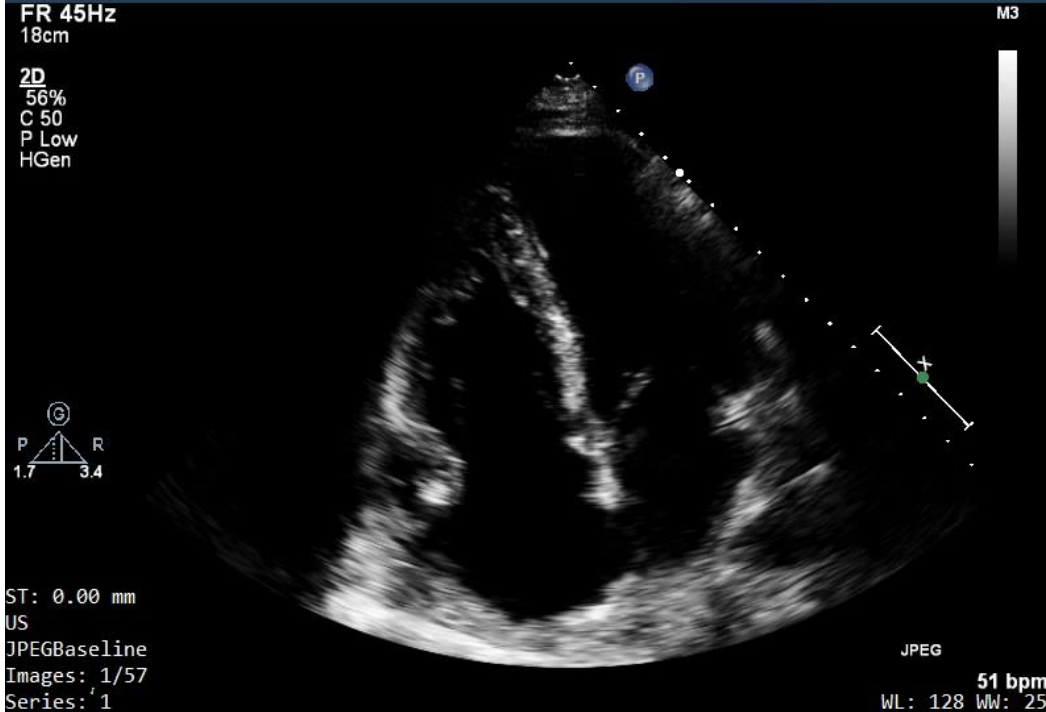
- **Low sensitivity in Native valve IE ( 31-36 %)**
- **Occluded RCA stent**
- **High Random blood sugar**



# Hospital course

- On the next day, after PET Scan fever spikes recurred (less aggressive )
- Worsening in his heart failure symptoms
  - New TTE



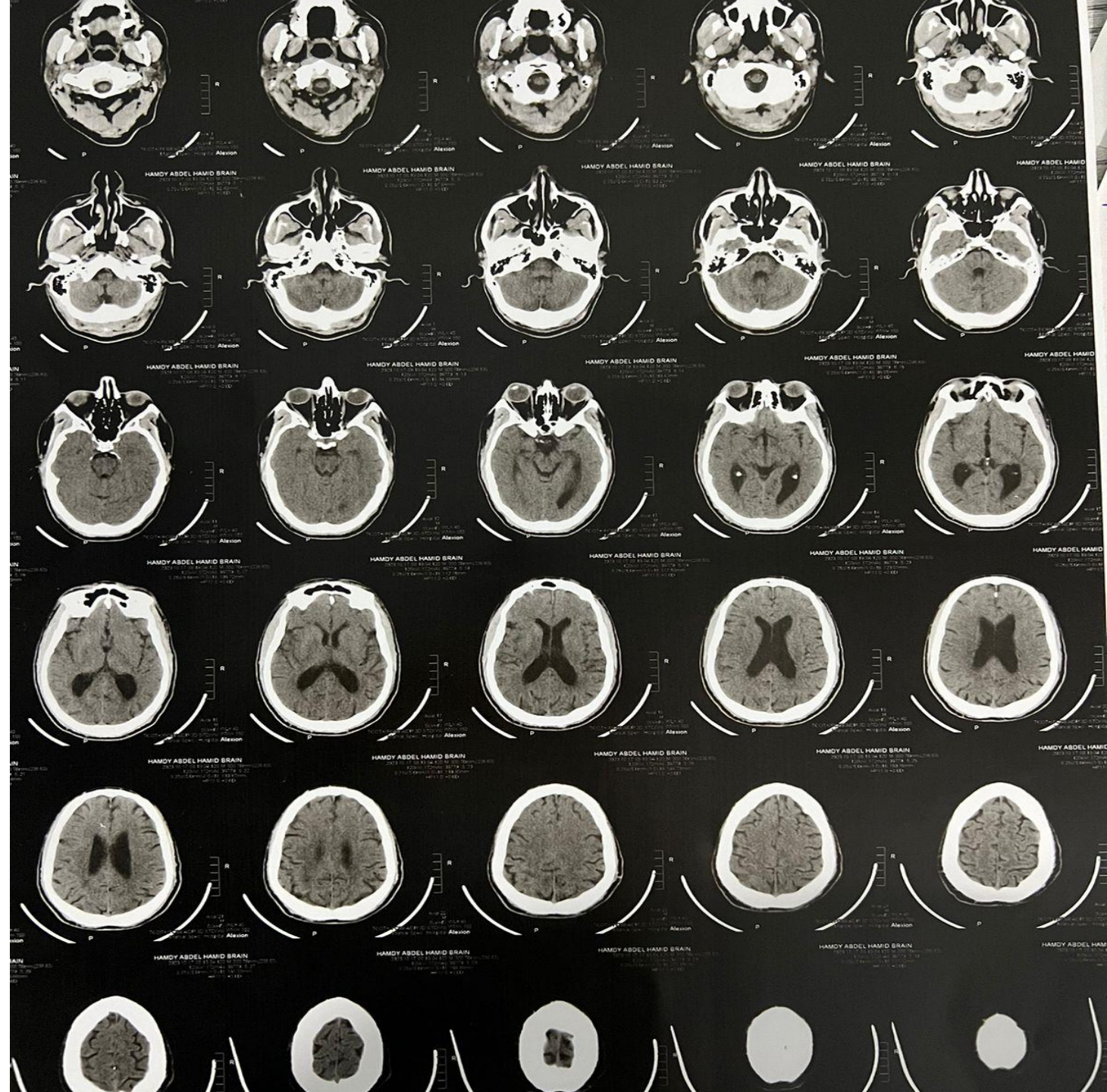


# Hospital course

- In the second day : left sided hemiplegia and dysarthria

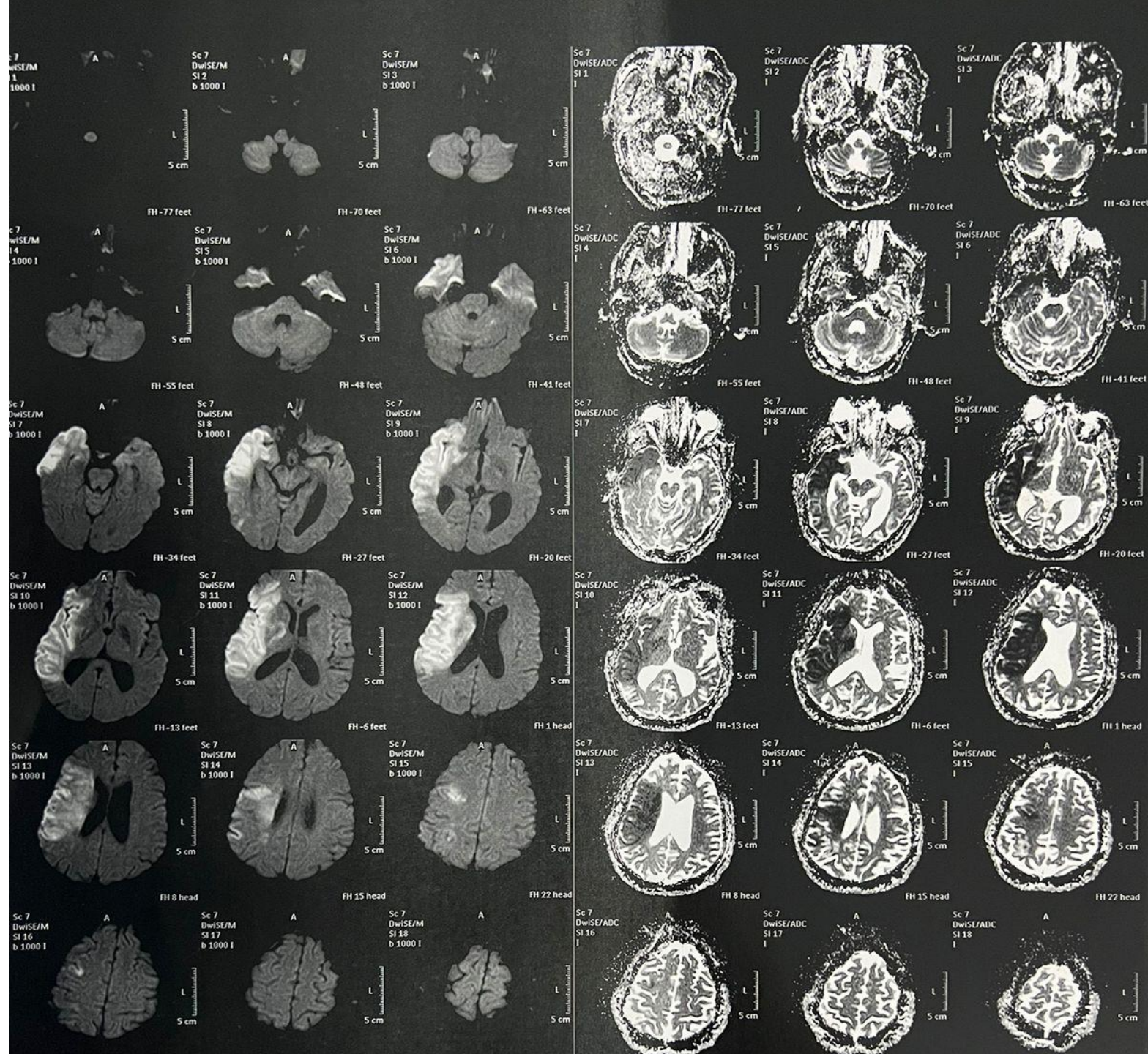


# CT brain



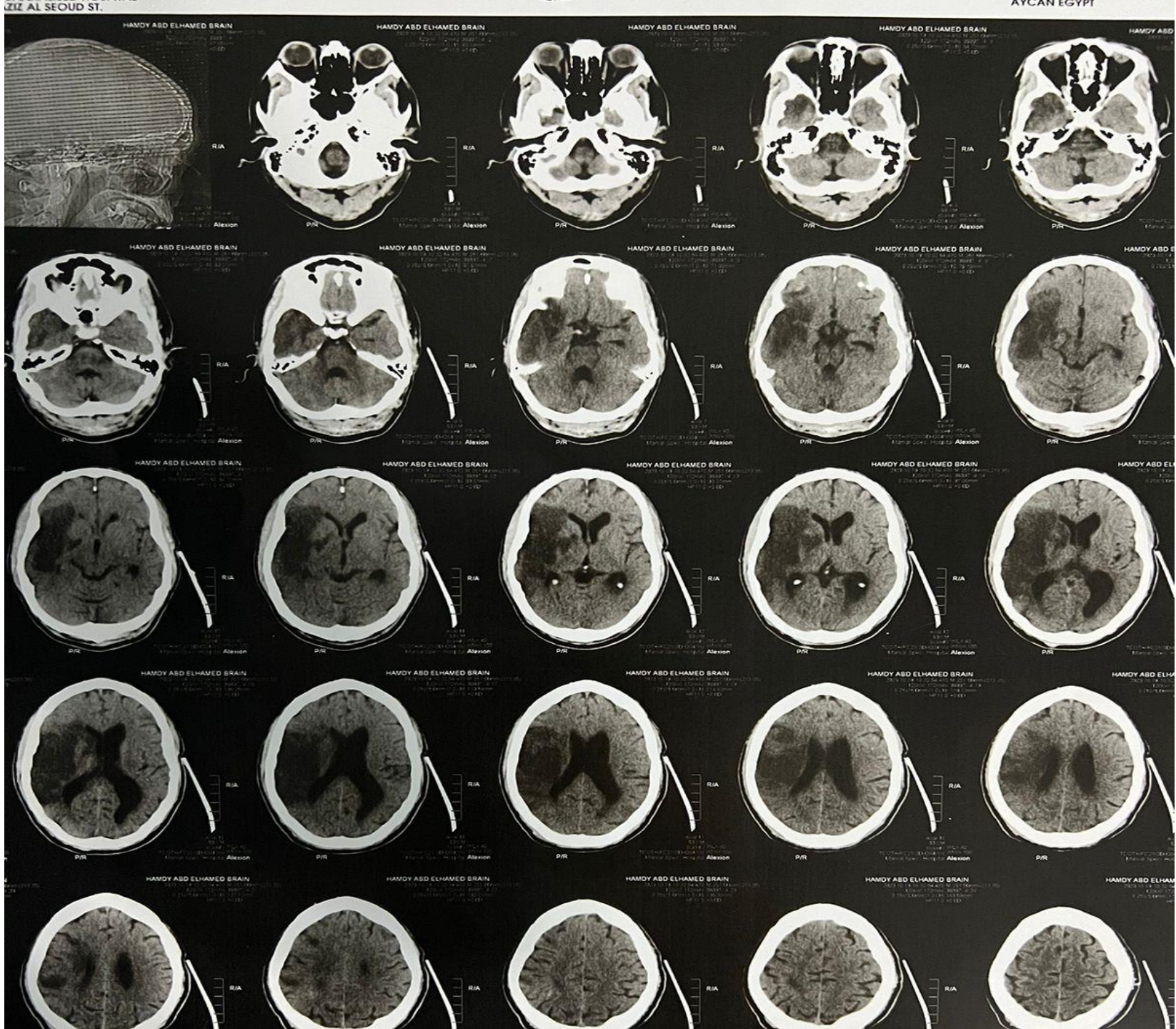


# MRI Brain





# CT brain ( Follow UP)

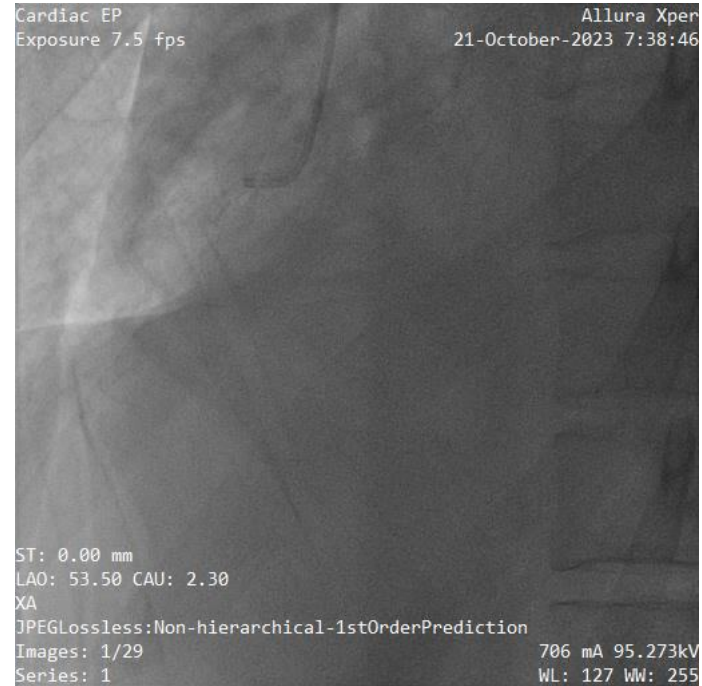


# Hospital course

- Neurologists recommendations
  - Diagnosis
  - Clinical assessment
  - Better to delay surgery for 5-7 days



# Coronary



Cardiac EP  
Exposure 7.5 fps

Allura Xper  
21-October-2023 7:40:19

ST: 0.00 mm  
LAO: 0.00 CAU: 34.90

XA

JPEGLossless:Non-hierarchical-1stOrderPrediction

Images: 1/41

Series: 2

859 mA 78.119kV

WL: 127 WW: 255



Cardiac EP  
Exposure 7.5 fps

Allura Xper  
21-October-2023 7:40:39

ST: 0.00 mm  
LAO: 37.80 CAU: 33.20

XA

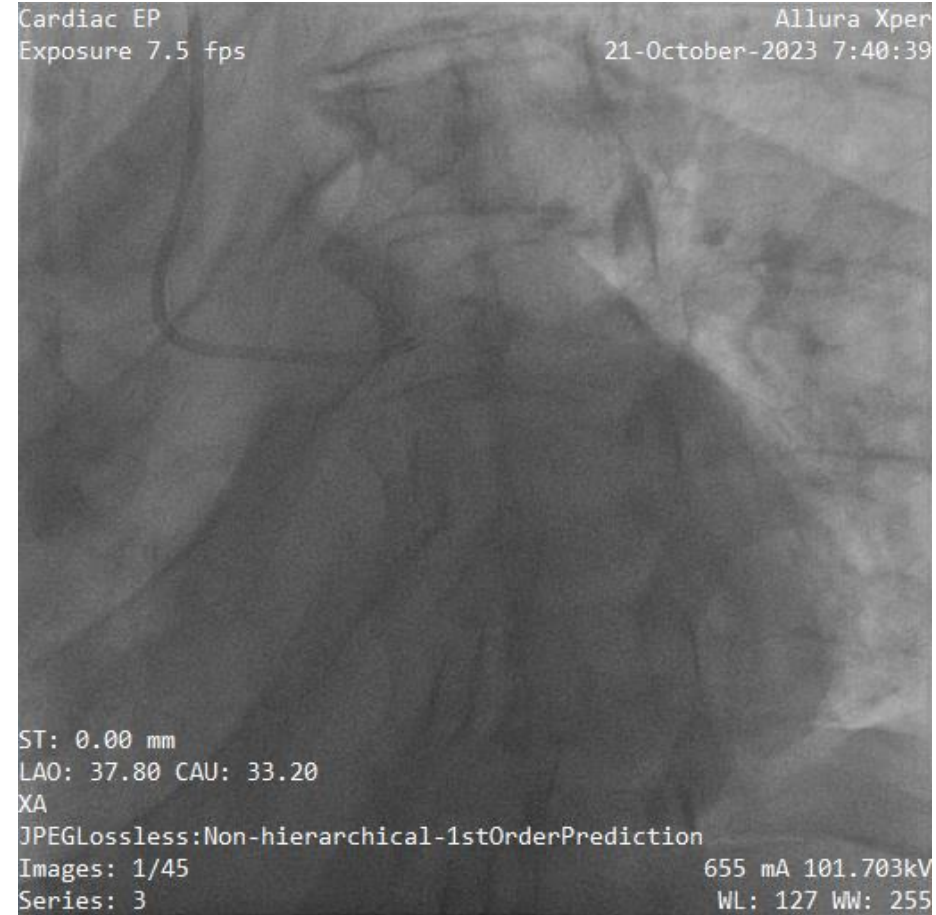
JPEGLossless:Non-hierarchical-1stOrderPrediction

Images: 1/45

Series: 3

655 mA 101.703kV

WL: 127 WW: 255



Cardiac EP  
Exposure 7.5 fps

Allura Xper  
21-October-2023 7:41:00

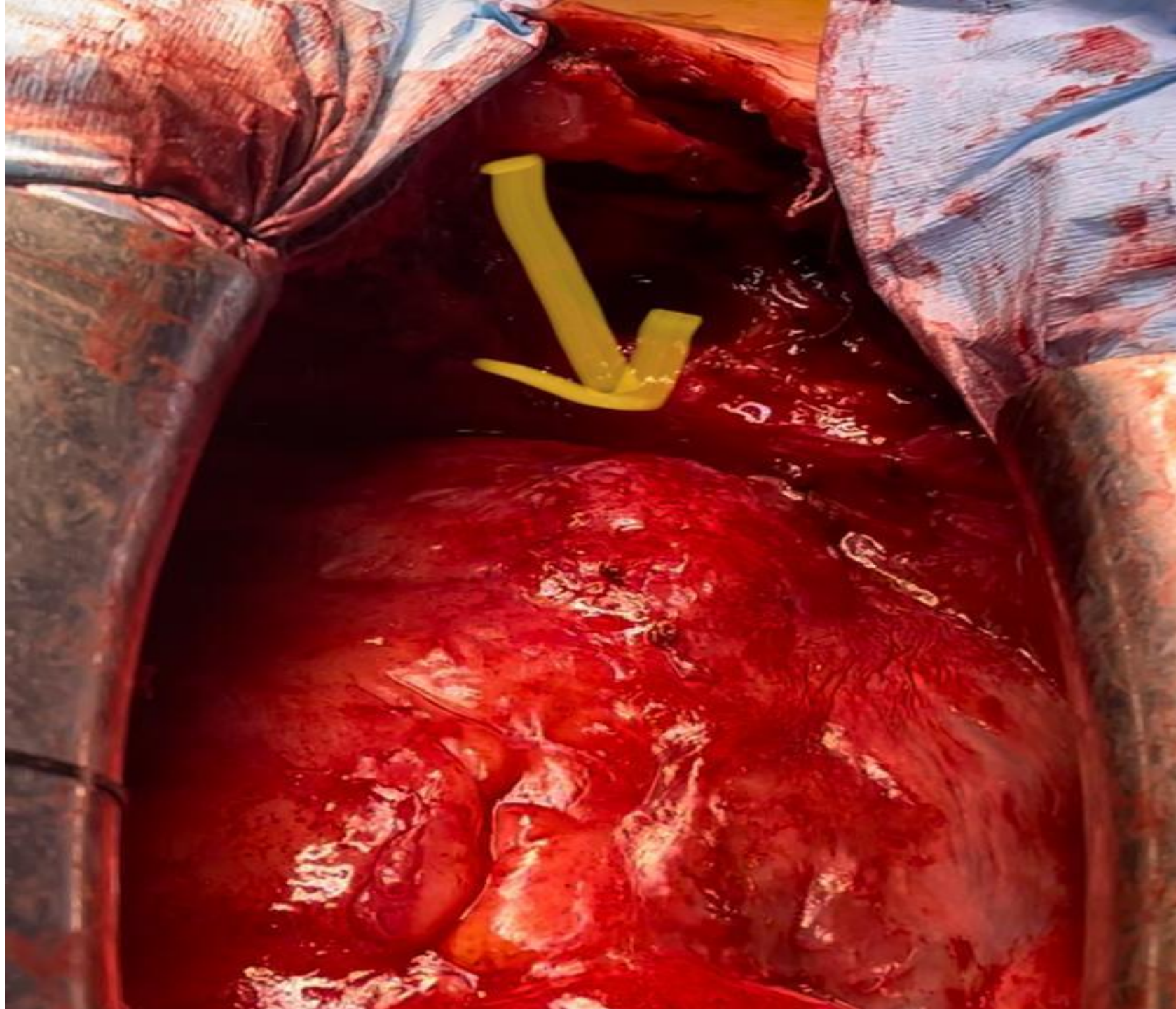
ST: 0.00 mm  
LAO: 2.40 CRA: 18.30  
XA

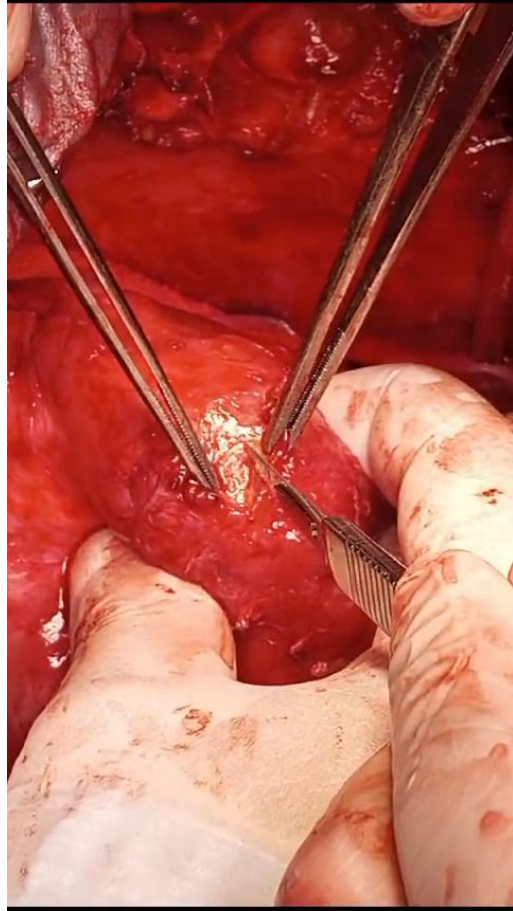
JPEGLossless:Non-hierarchical-1stOrderPrediction  
Images: 1/43  
Series: 4

836 mA 79.483kV  
WL: 127 WW: 255

# Surgical Details



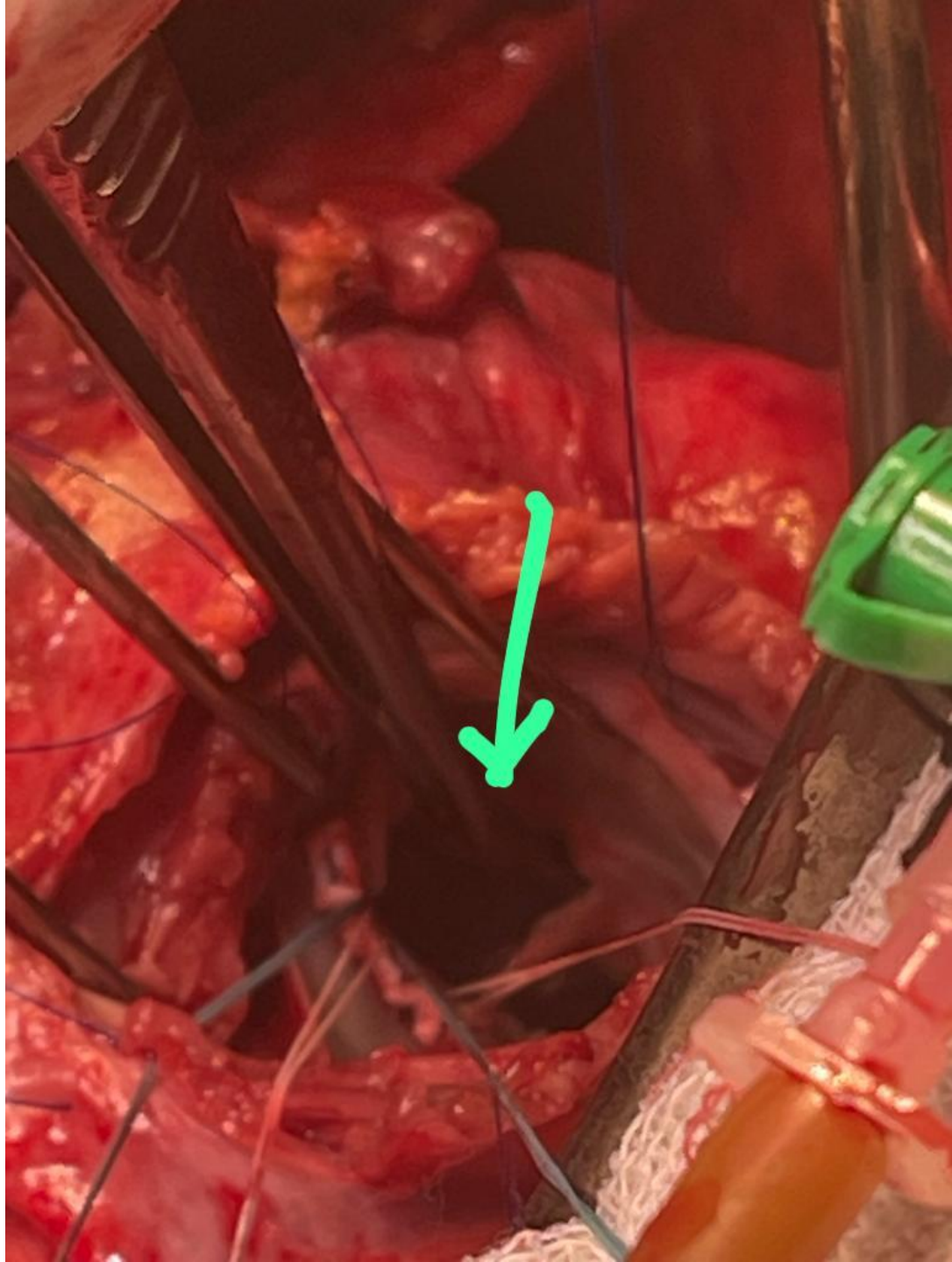












- **Details of surgery**

- **SVG to PDA**

- **LIMA to LAD**

- **Opening of the abscess**

- **Removal of the infected stent**

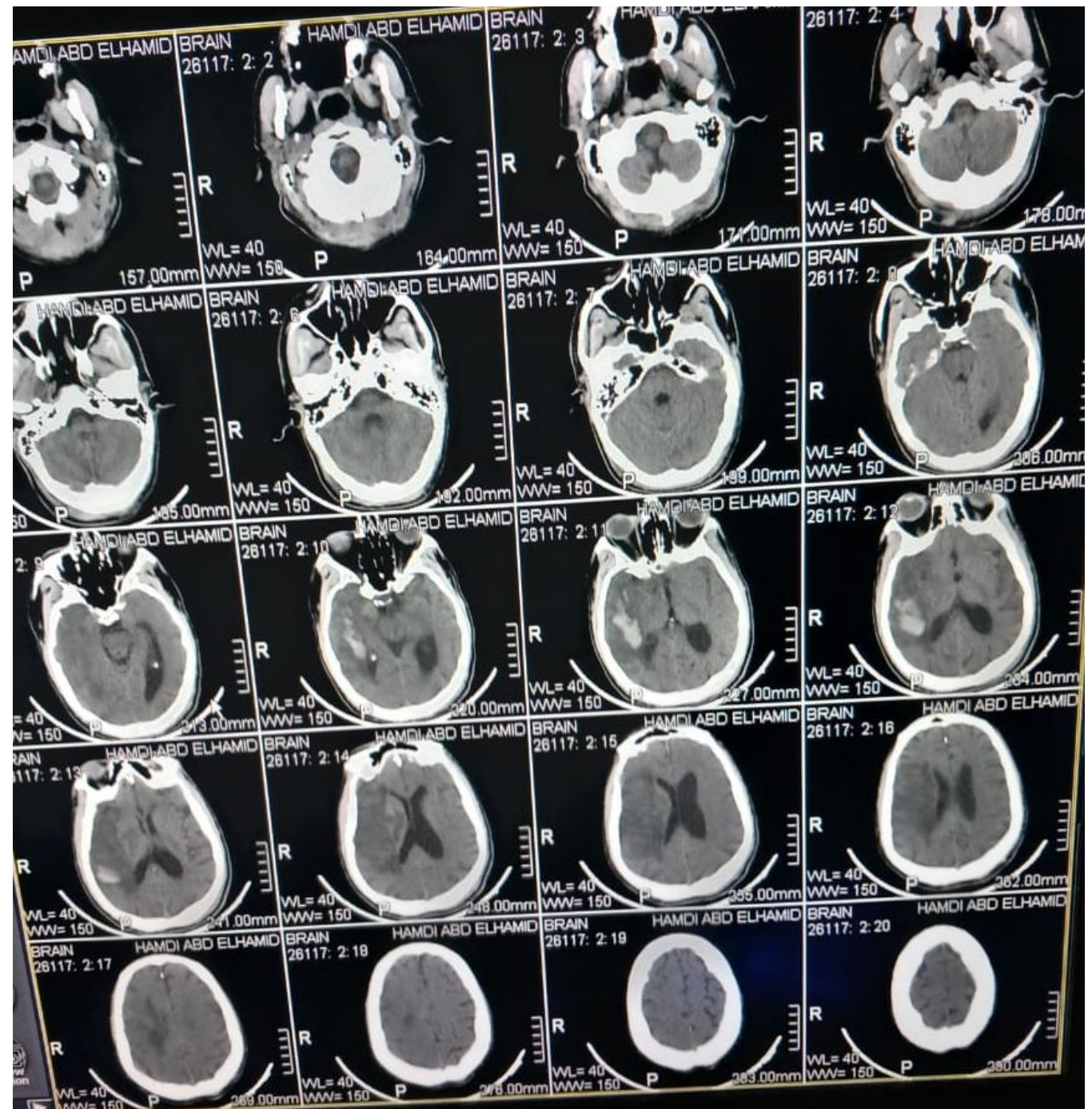
- **Mitral ring abscess resection and MVR**

# Postoperative course

- Successful weaning from vasopressors / inotropes
- Successful weaning from mechanical ventilator
- Postoperative Echocardiography
- Deterioration in his Conscious level : GCS 12/15



# New CT brain



- **Neurologists recommendations**
  - **STOP ALL Anticoagulation**
  - **Start brain dehydrating measure**
  - **Repeated CT brain**

- **Tissue Culture came out**
  - **Penicillium**
  - **Voriconazole and Caspofungin was added**
- **Unfortunately ,**
  - **10<sup>th</sup> postoperative day , conscious level dropped**
  - **Hemodynamic compromise**
  - **Resuscitation**

**Thank You**