
A 43-years old man with chest pain

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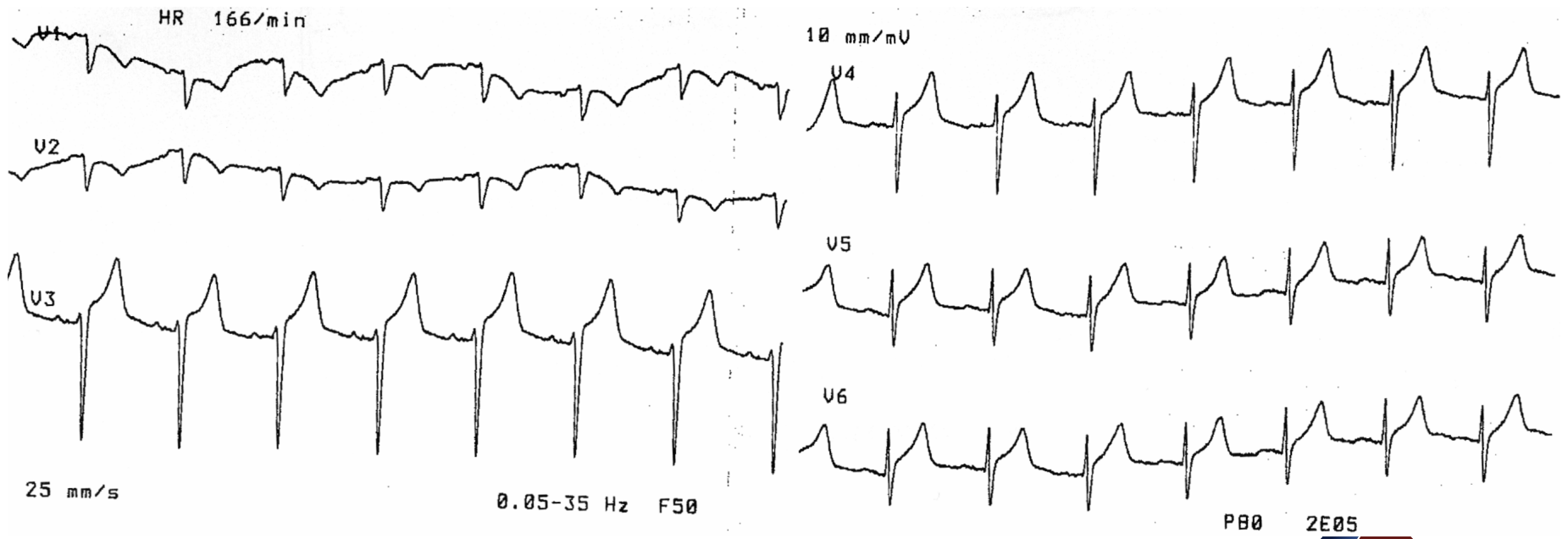
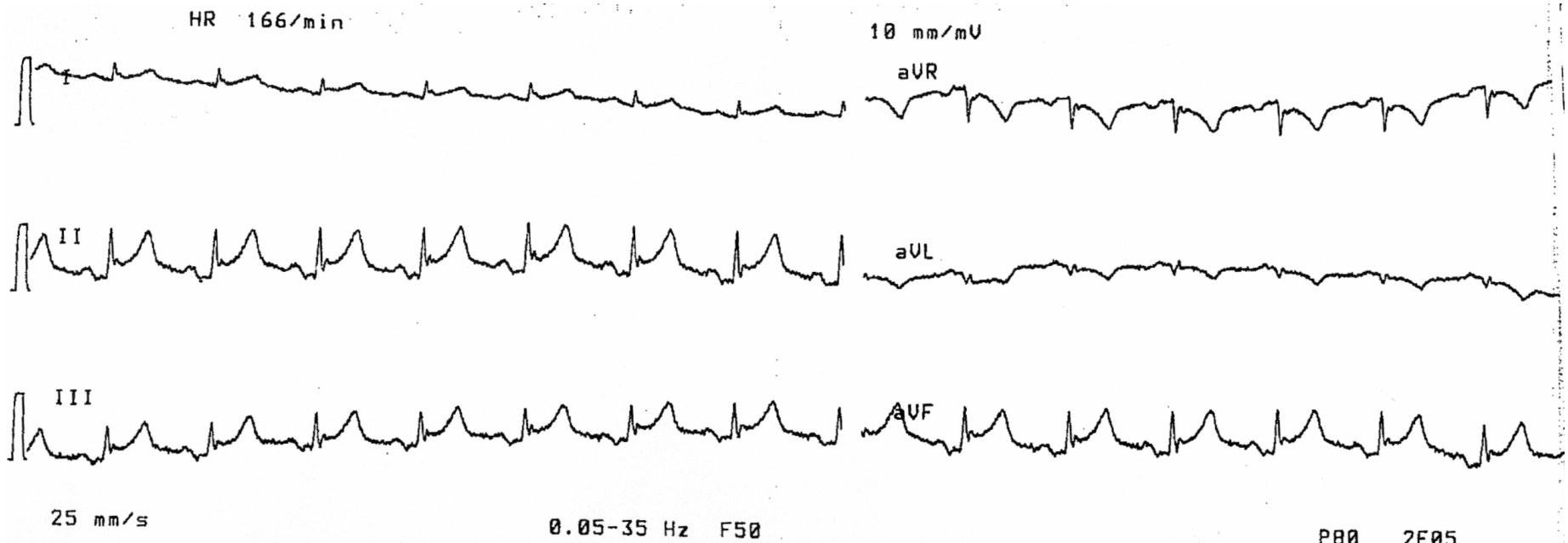
A virosis

- A 43-years old man, asthenic, in the past history only intermitent back pain, without any regular medication
- In September 2007 had to stay home for a week due to a virosis (fever with coryza, cough, arthralgias)



Chest pain

- One week after he recovered from the virosis he developed sudden chest pain after waking up
- He felt retrosternal pressure or burning irradiating to the neck, without any sweating or dyspnea, the symptoms lasted several hours, increased when he walk to the doctor
- He was admitted to internal medicine ward



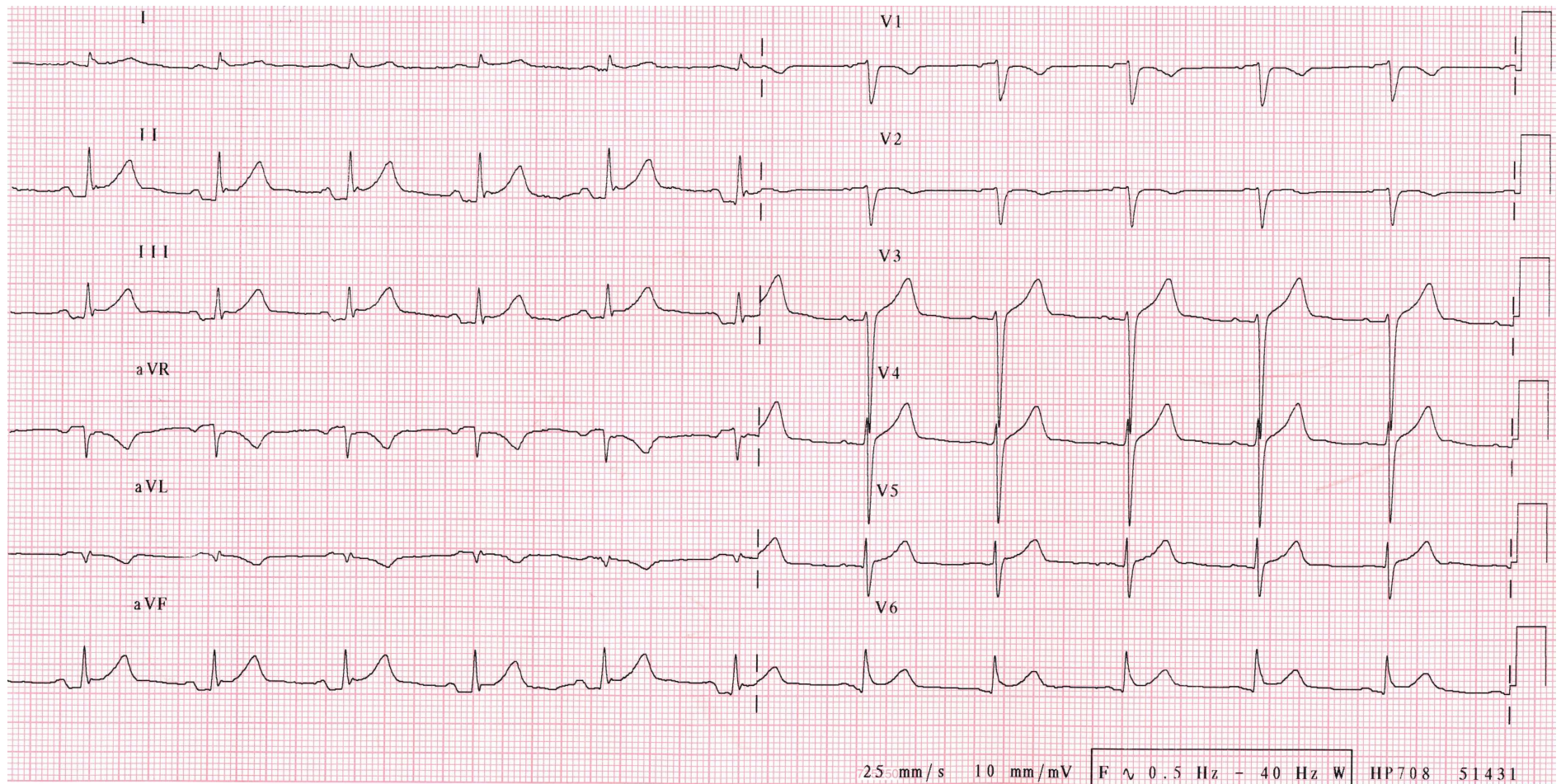
Laboratory findings

- Leu 12,7, normal differential blood count
- CRP 47...61...97
- Troponin I 1,0...2,6
- FW 34 mm/hod
- Hb 124, HCT 0,4, Ery 4,27
- Urea 5,1, creatinine 76, glycemia 5,5
- ALT 0,75, AST 0,37, ALP 1,41, GMT 1,04
- Cholesterol 3,3, LDL 1,8, TG 0,67, HDL 1,27

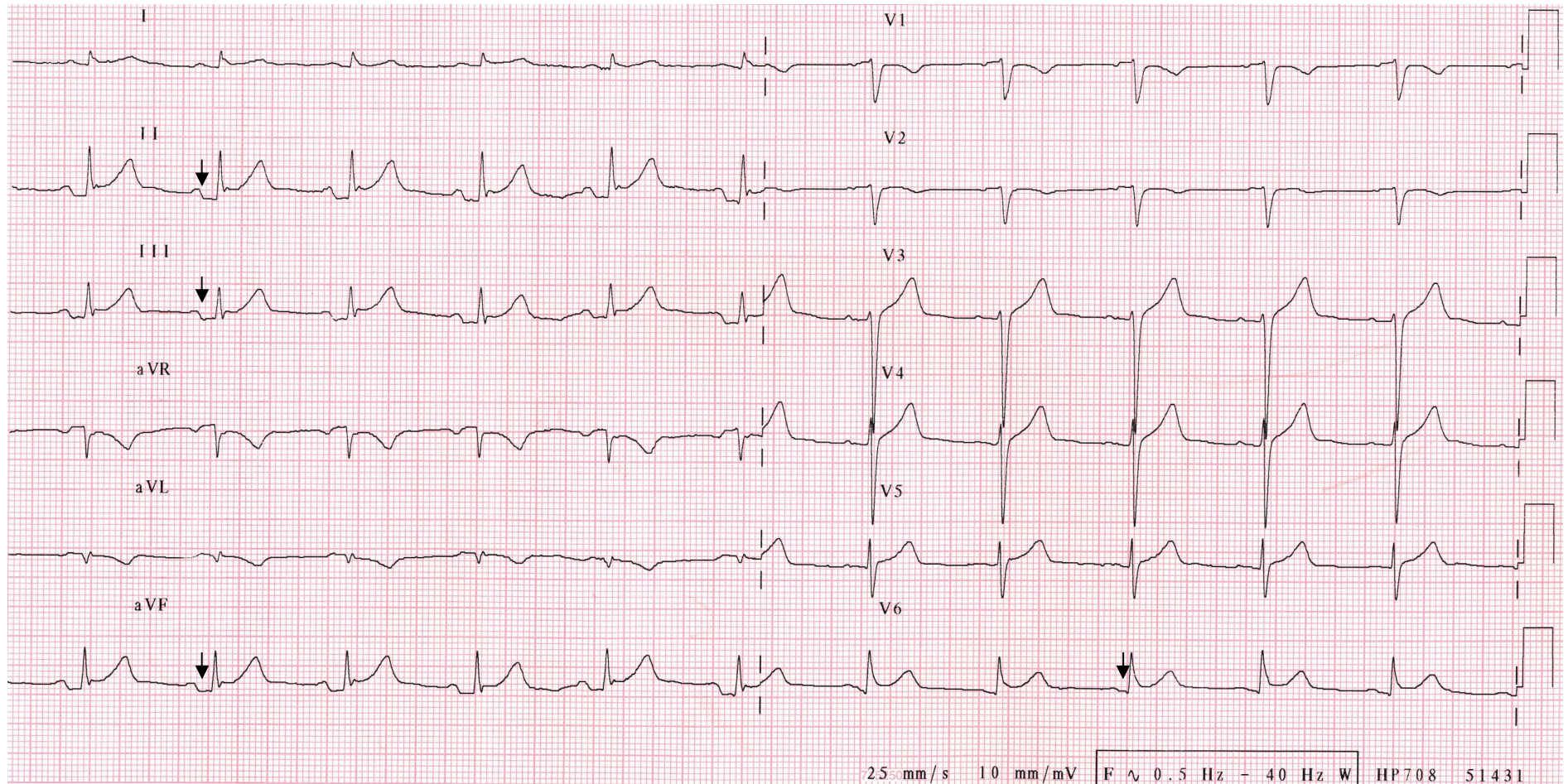
Troponin positivity

- Because of troponin positivity and ECG changes the treatment of acute myocardial infarction was initiated (ASA, betablocker, statin, nitrate, LMWH), the chest pain did not reappear
- ECG changes persisted → coronary angiography was indicated to distinguish between acute myocardial infarction and perimyocarditis

Persistent diffuse ST elevations



PQ segment depressions

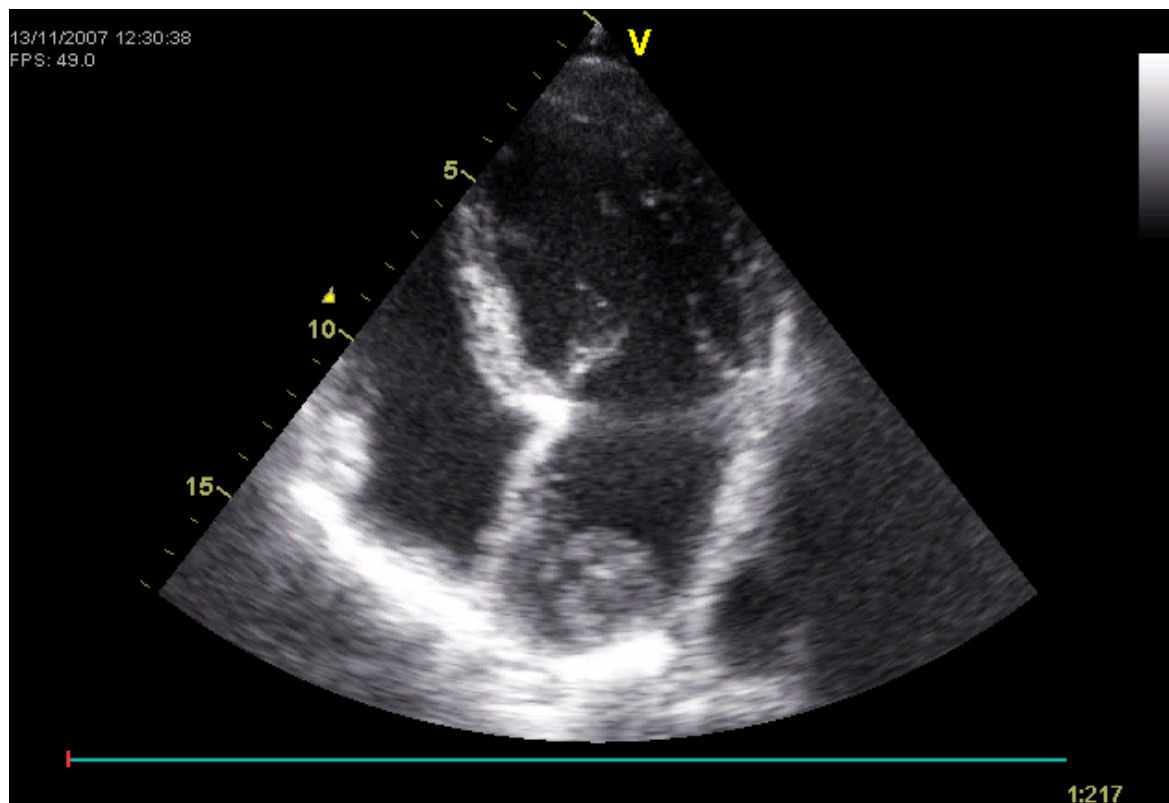


Coronary angiography

- Coronary AG was negative – no coronary stenoses, normal LV function on ventriculography with EF 65%
- The heart seemed to be little dilated by a pericardial fluid
- Current working diagnosis – acute perimyocarditis

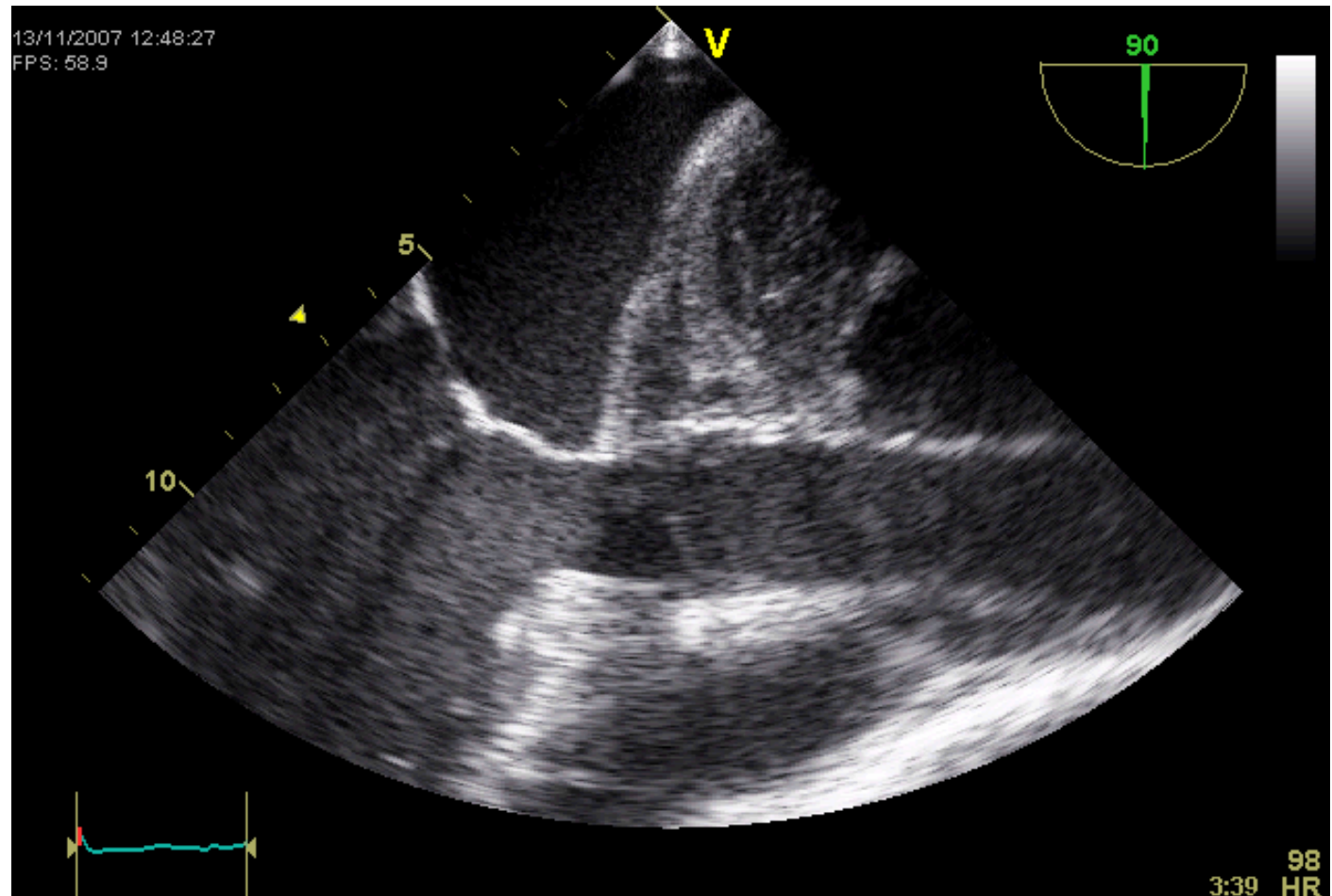
Echocardiography

- Normal LV function and ejection fraction, no valvular defect, no pericardial effusion
- Found a round structure sized 3,5x3,5 cm in left atrium – suspicion on myxoma



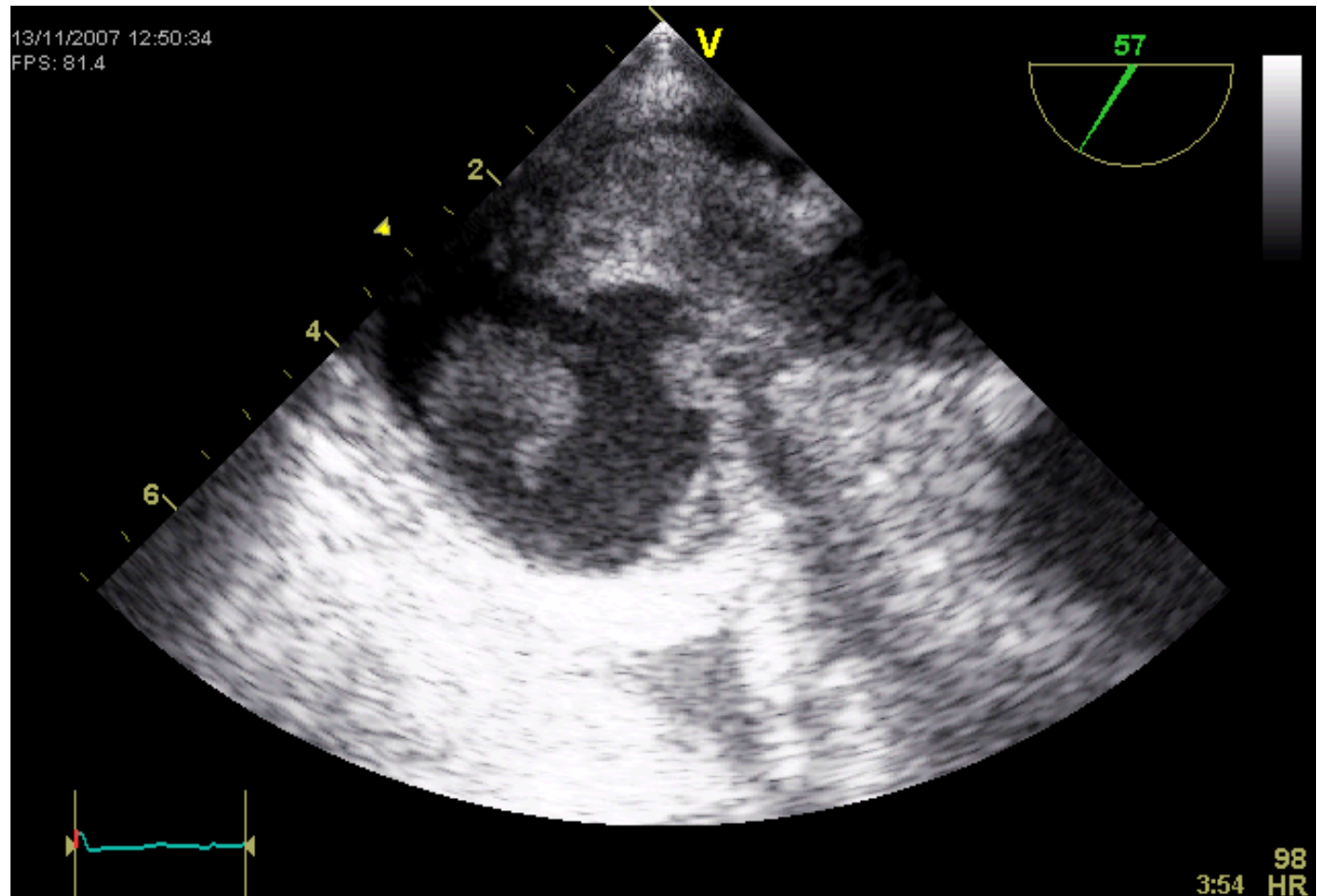
Transesophageal echocardiography

Between ascending aorta, pulmonary artery and left atrium a hyperechogenic structure sized 7x5x5 cm, probably a large thrombus



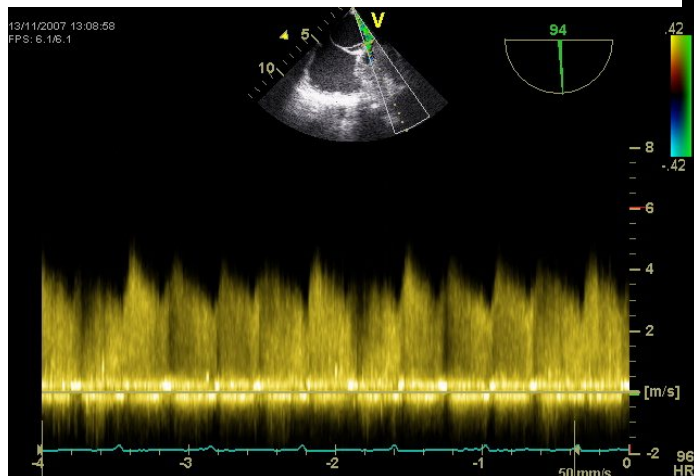
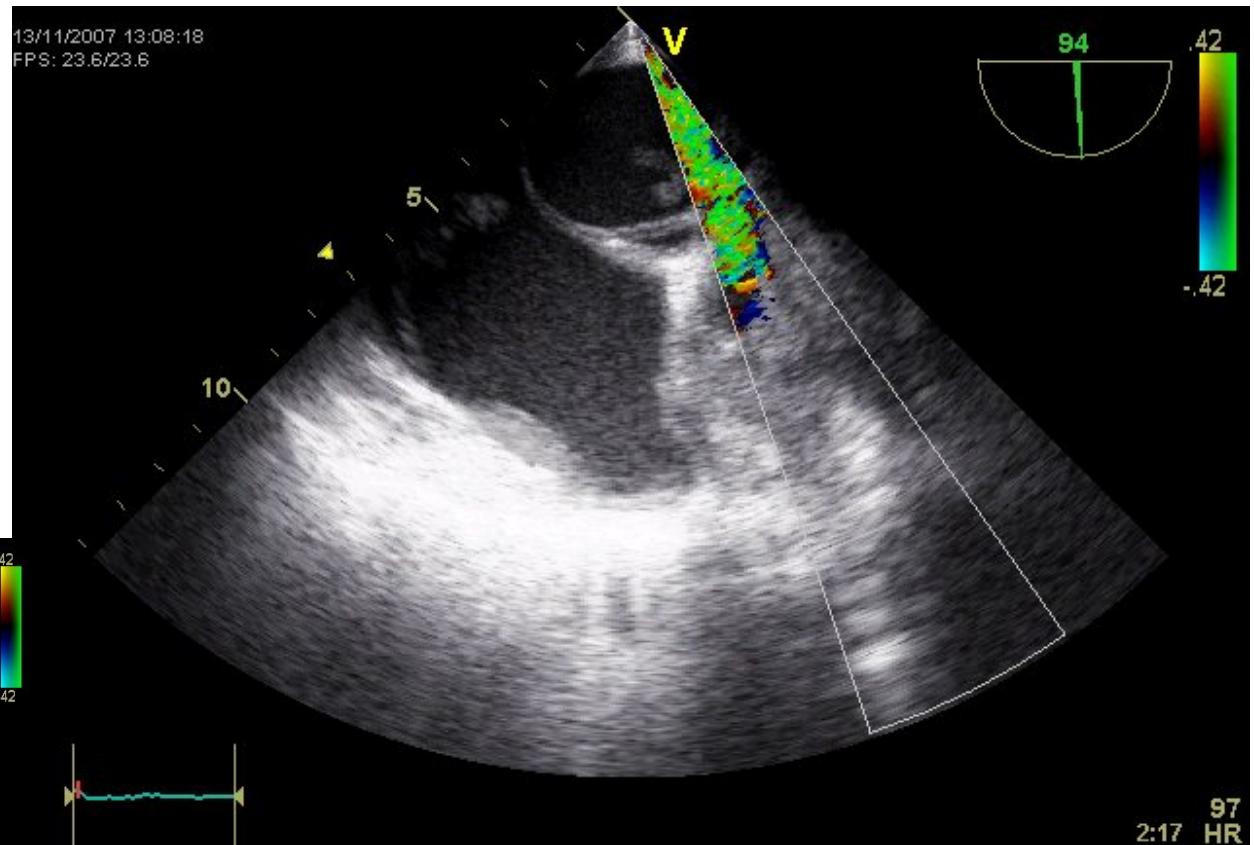
Transesophageal echocardiography

Thrombus penetrates the left atrial wall with a cca 2,5 cm long hypermobile part, flapping in the left atrium



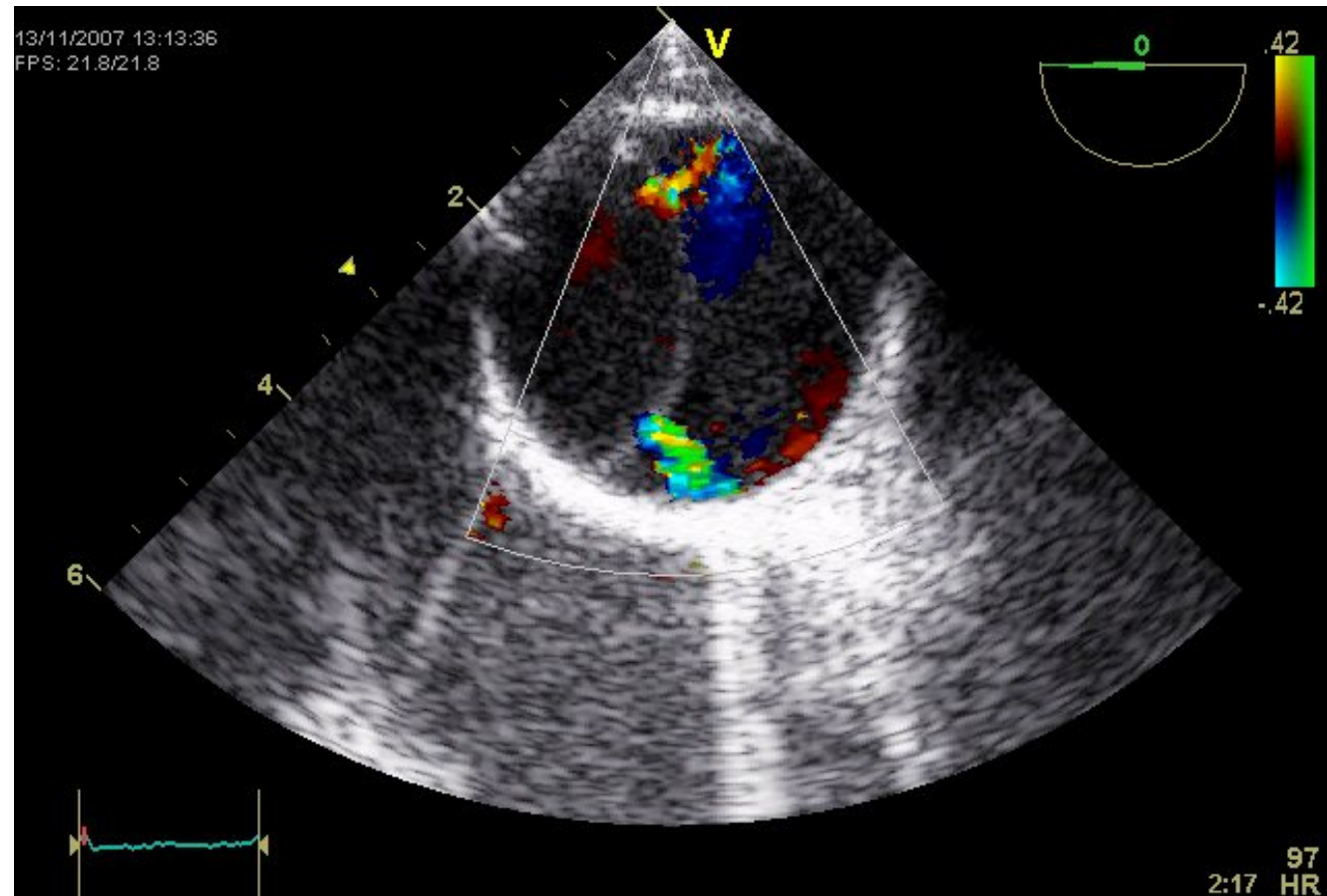
Transesophageal echocardiography

Along the thrombus there is a continuous flow with a constant gradient of 77 mmHg, flowing into the left atrium



Transesophageal echocardiography

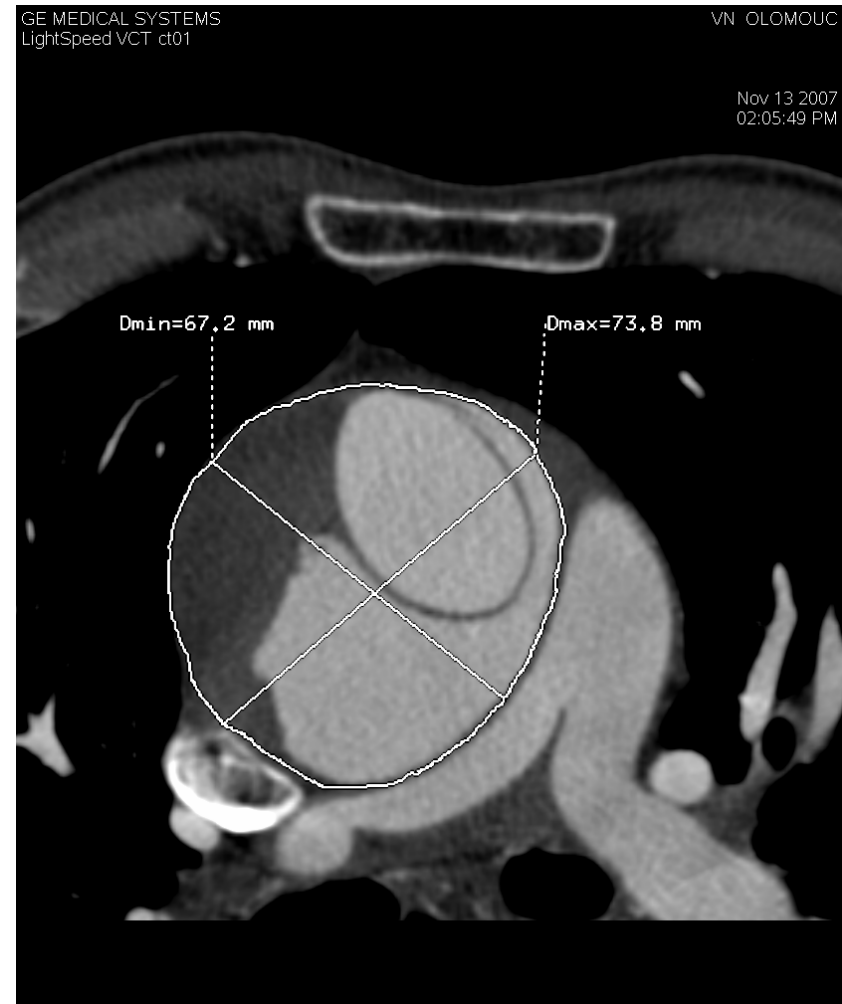
Aortic dissection is found in ascending and descending aorta, with documentation of the shunt flow from the true to the false lumen in descending aorta



Diagnosis

- Aortic dissection of both ascending and descending aorta, with a thrombus in the false lumen of the ascending aorta penetrating into the left atrium by its hypermobile part
- Acute CT angiography of aorta and subsequent surgery are indicated

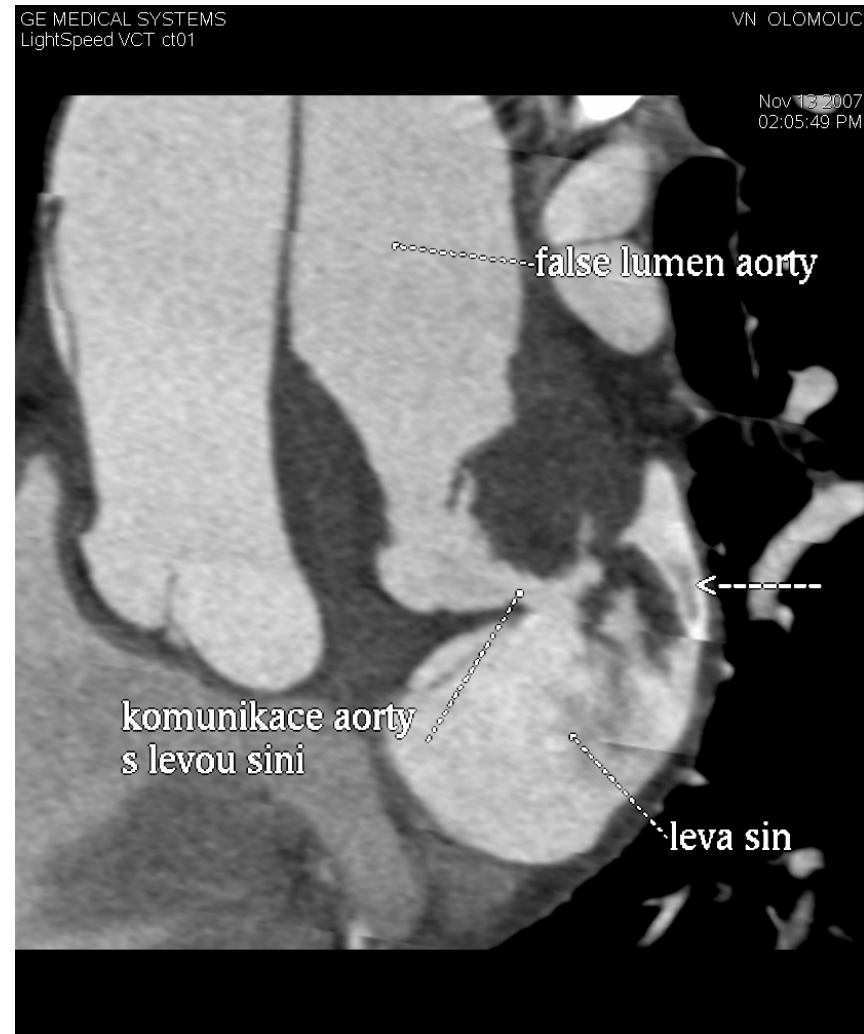
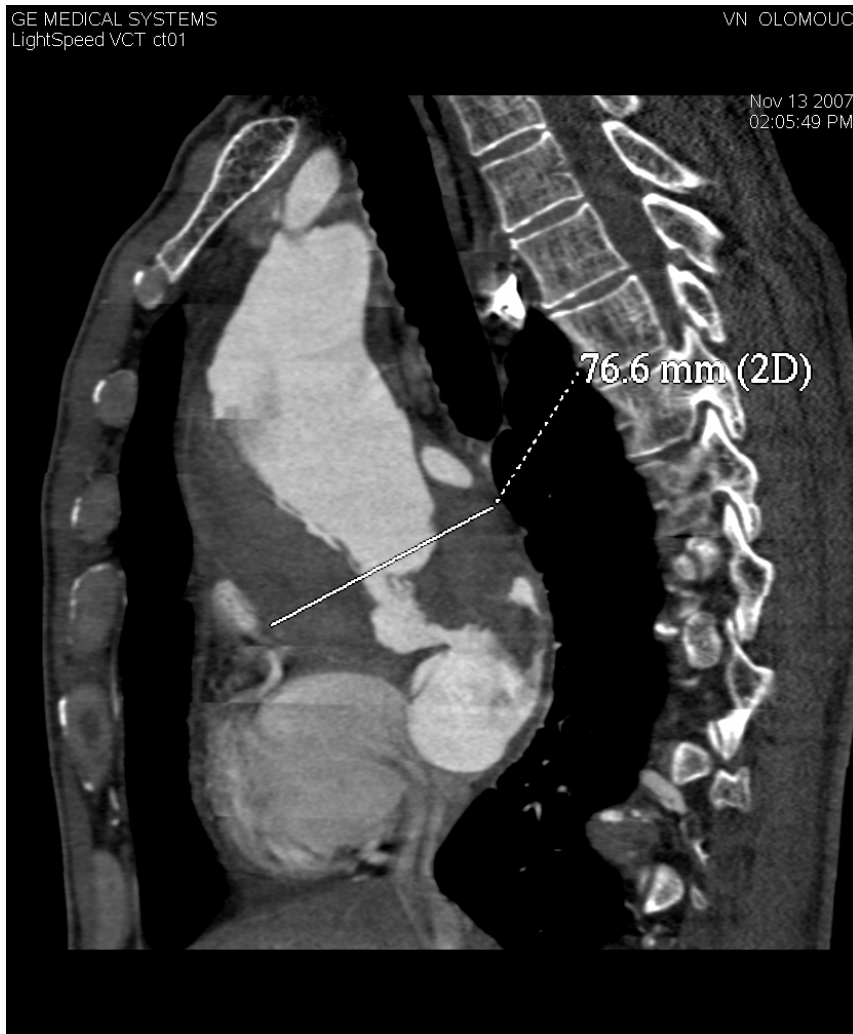
AngioCT of the ascending aorta



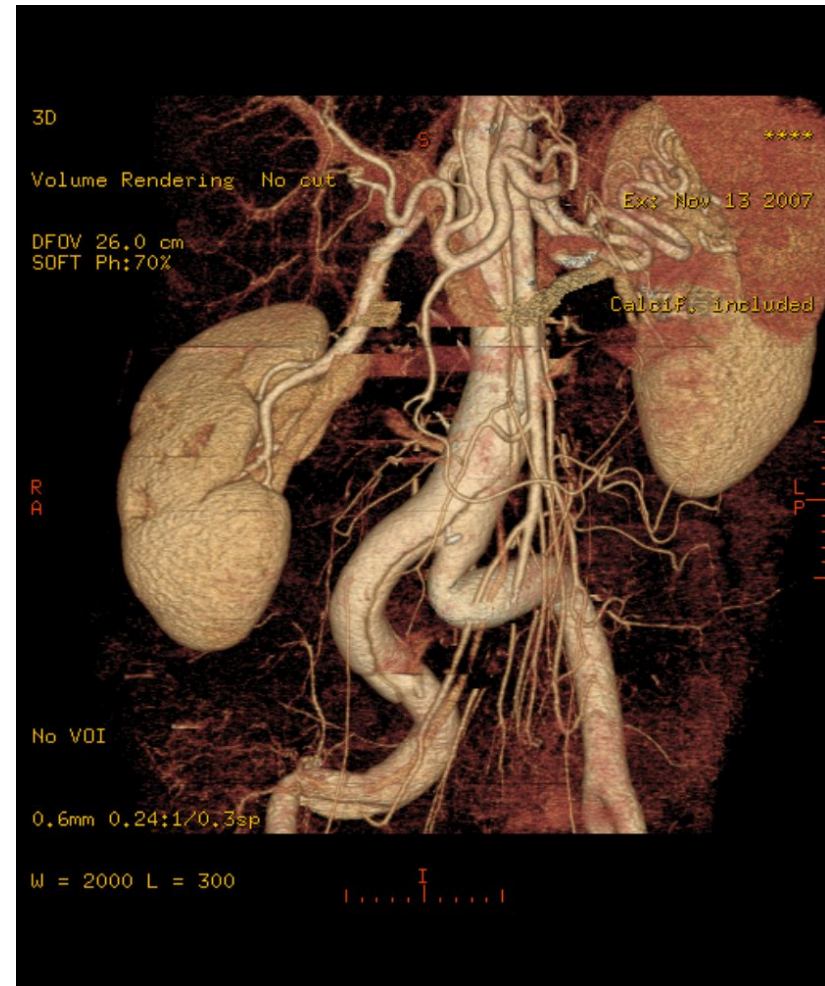
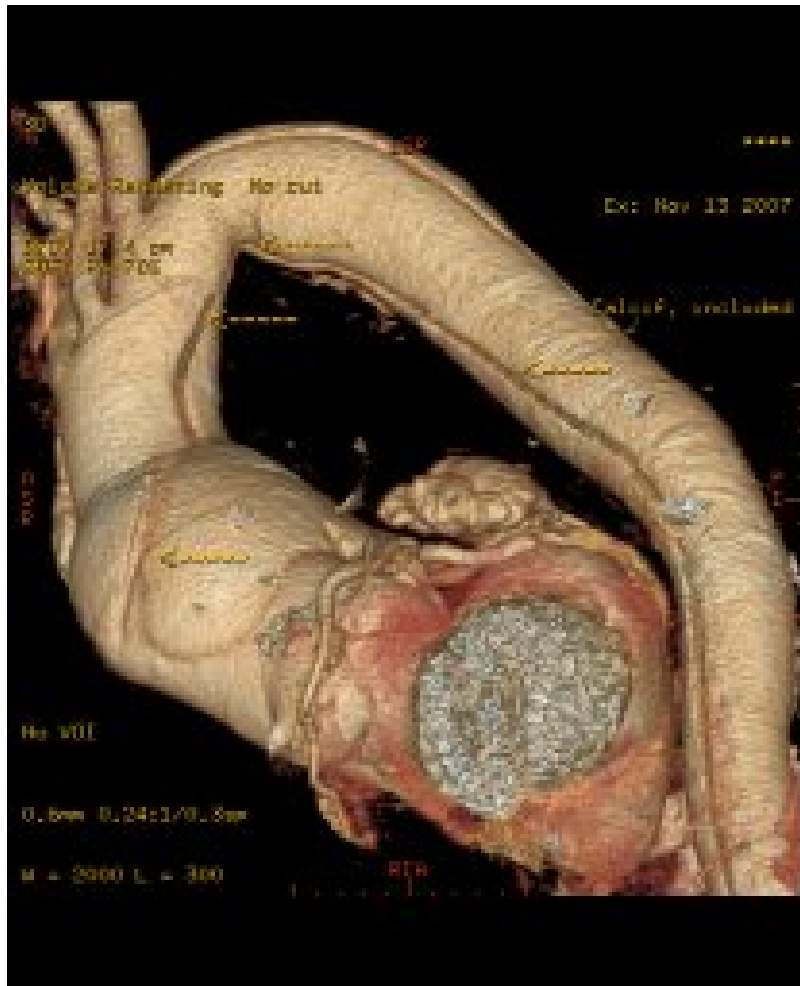
AngioCT of the radix and aortic arch



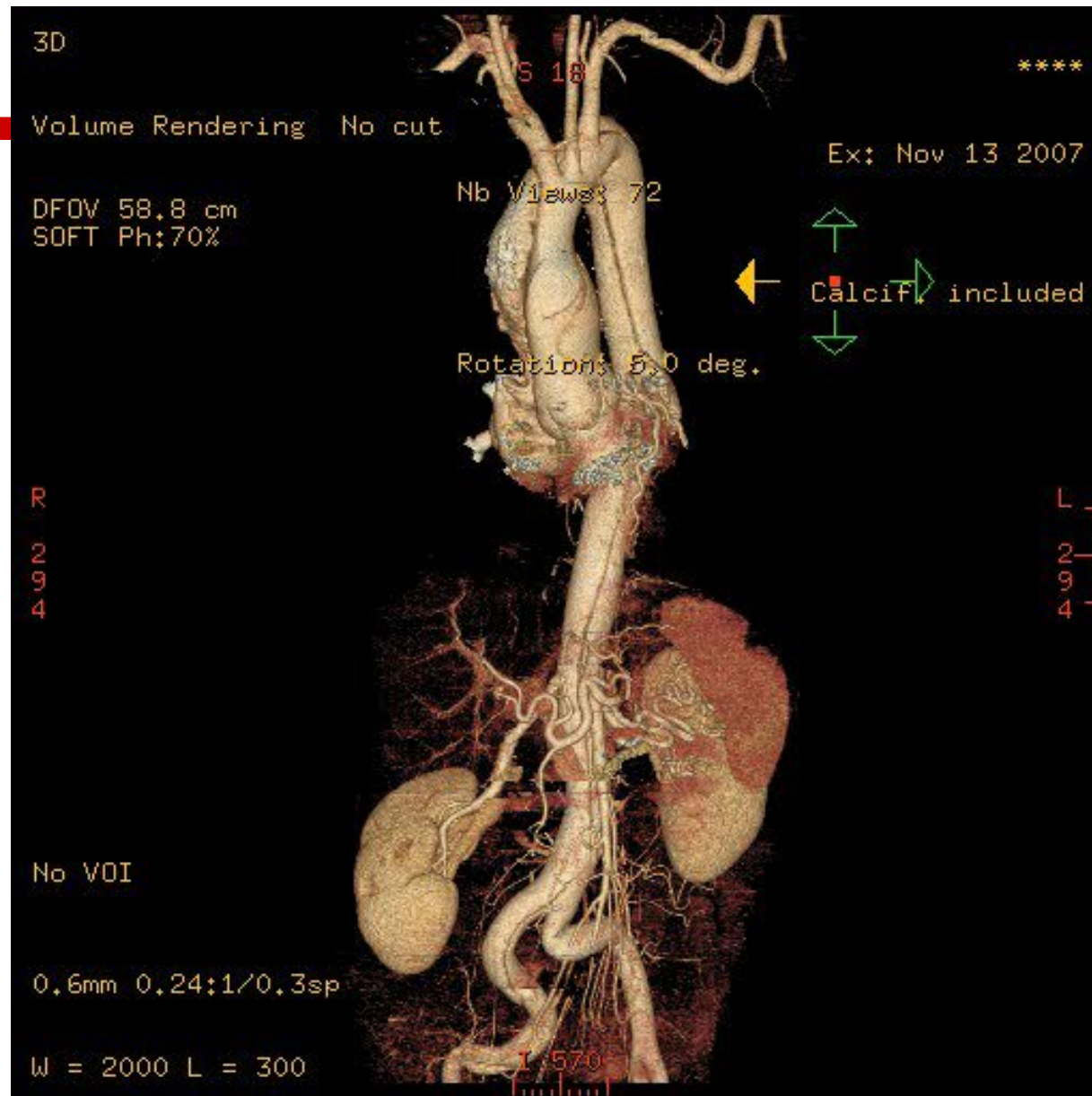
AngioCT of the aorta – sagittal reconstruction



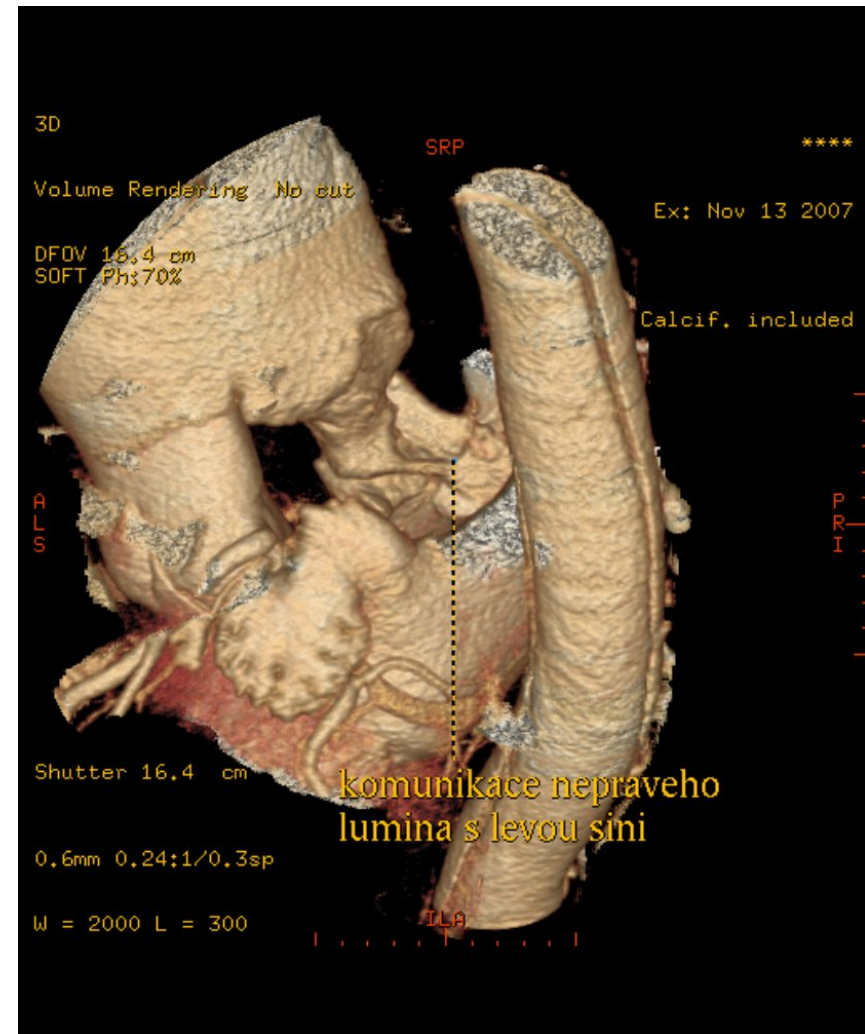
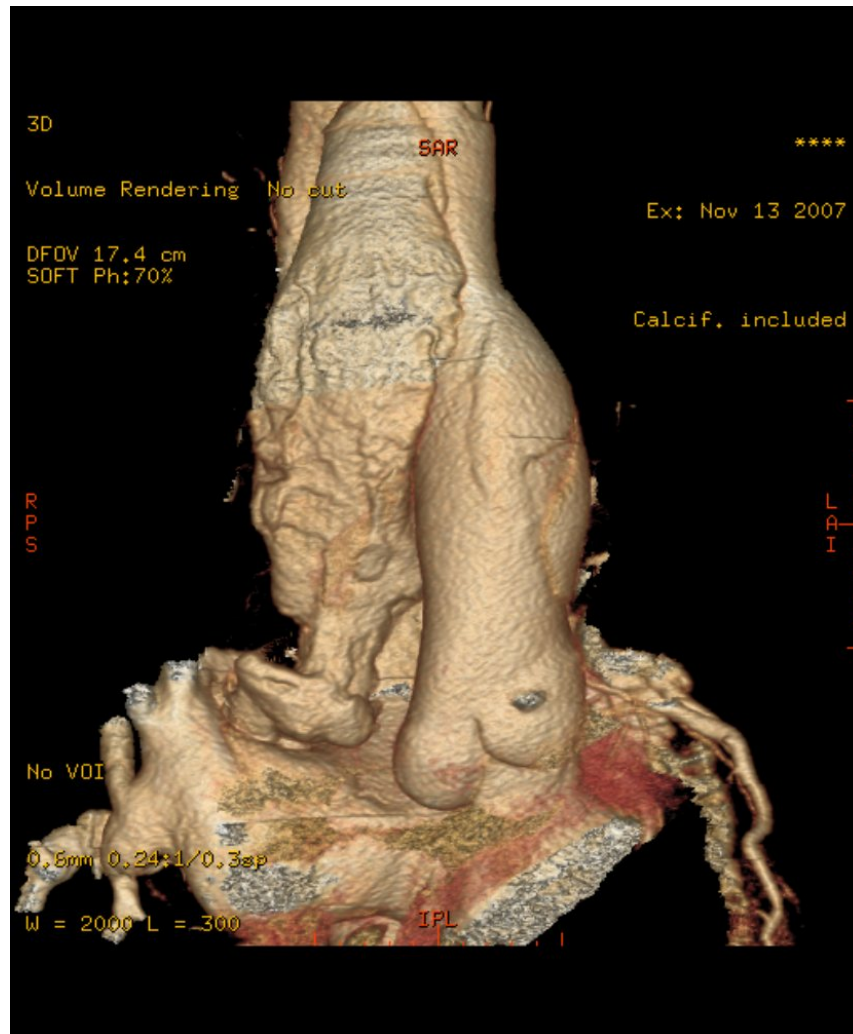
AngioCT – 3D reconstruction thoracic and abdominal aorta



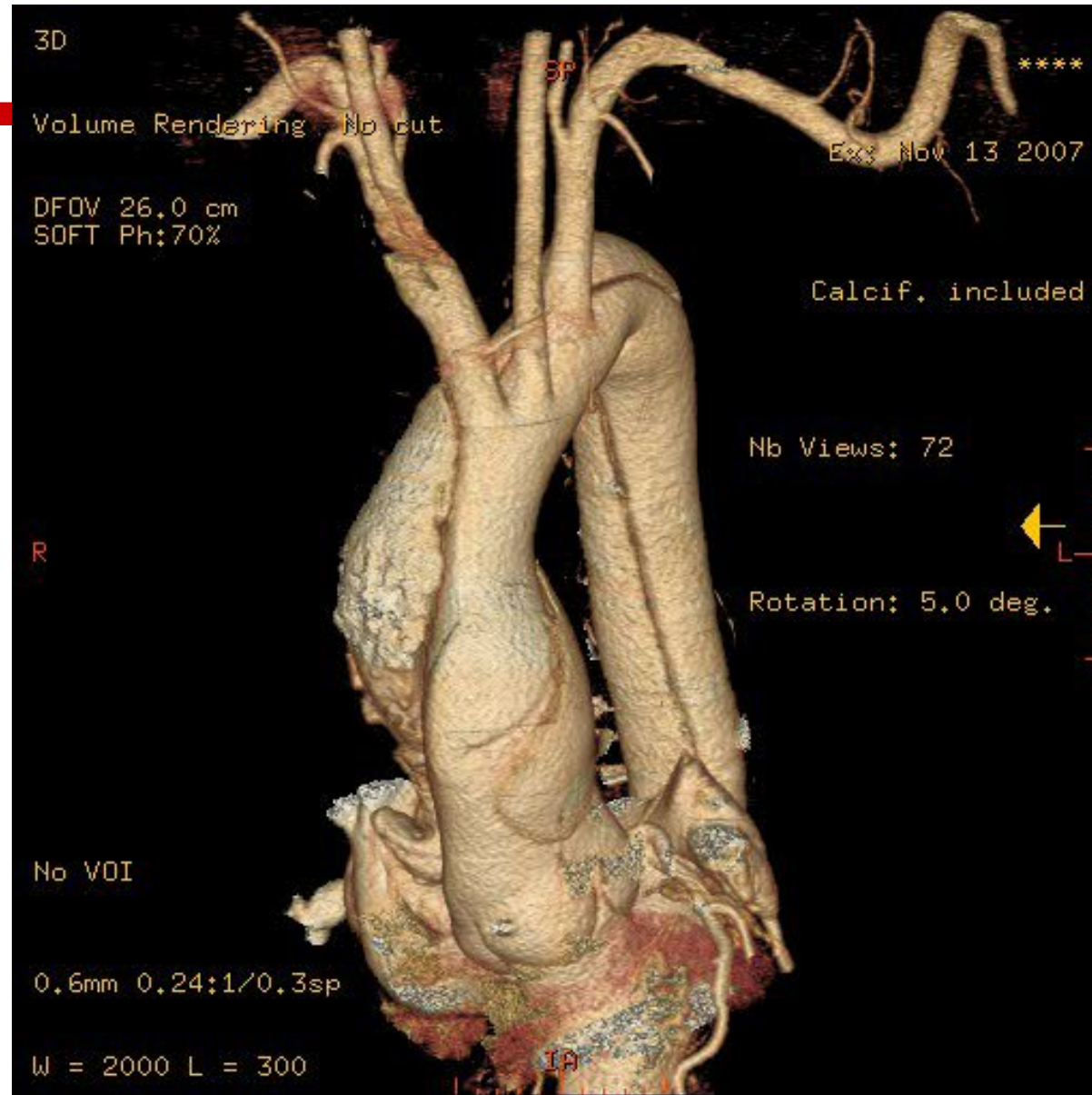
AngioCT – 3D reconstruction



AngioCT – 3D reconstruction false lumen and communication with left atrium



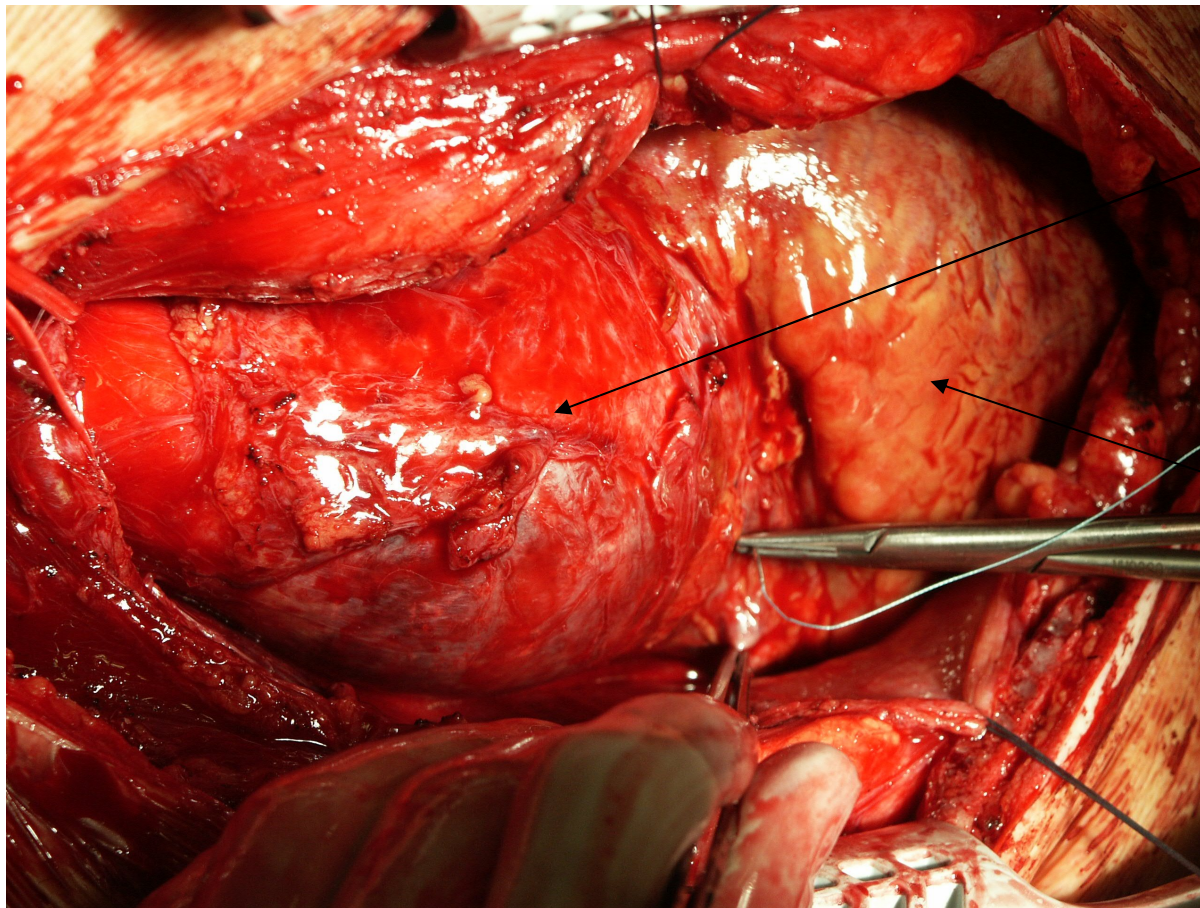
AngioCT – 3D reconstruction



Surgery

- 13.11. Acute aortic valve and ascending aorta replacement was performed (Bental operation)
- Numerous adhesions were found in pericardium, suggesting there were some previous attacks of dissection
- Blood loss was high during surgery, but eventually the patient was successfully hemodynamically stabilized

Surgery

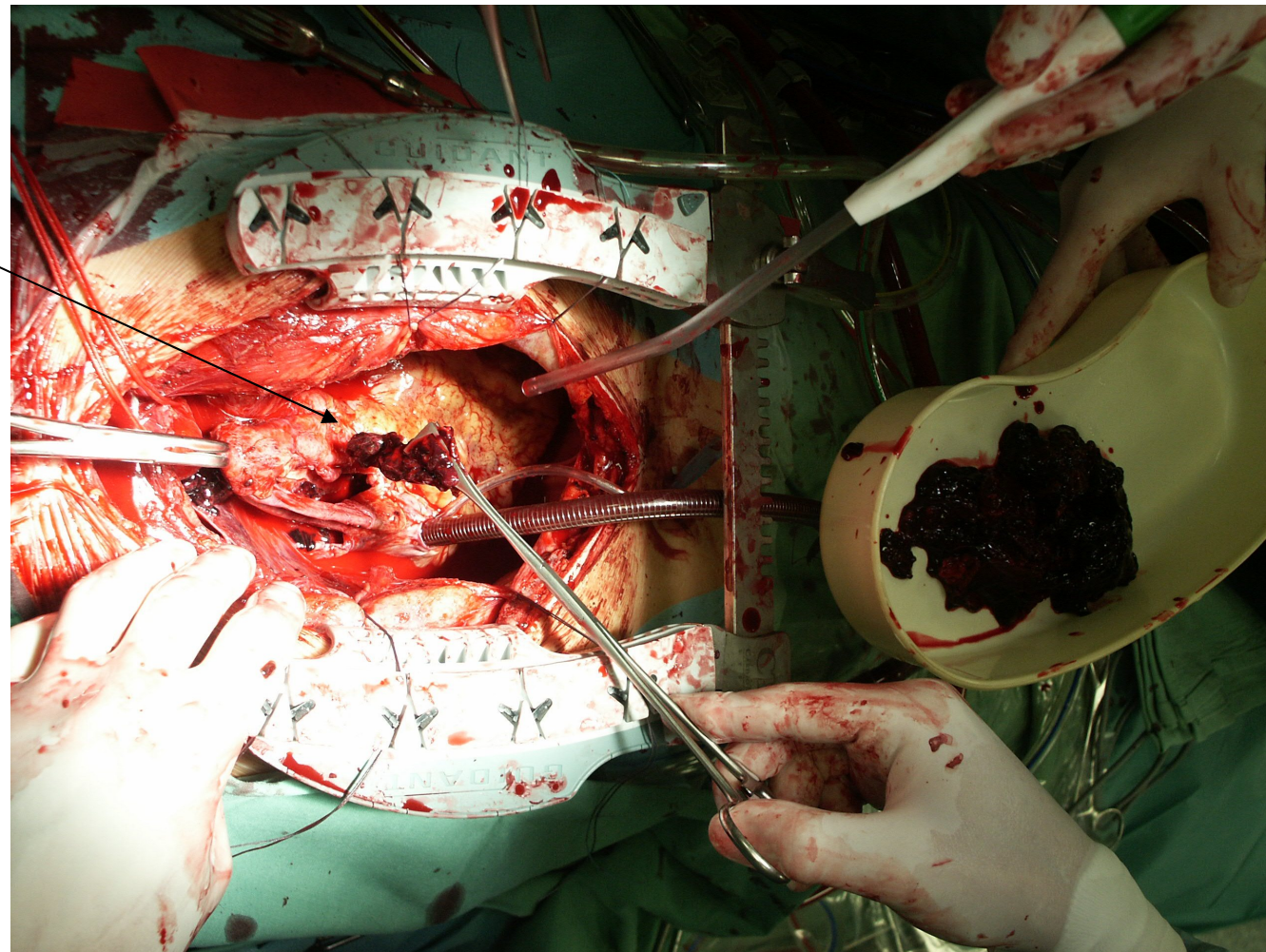


False lumen of the dissected ascending aorta filled with thrombi

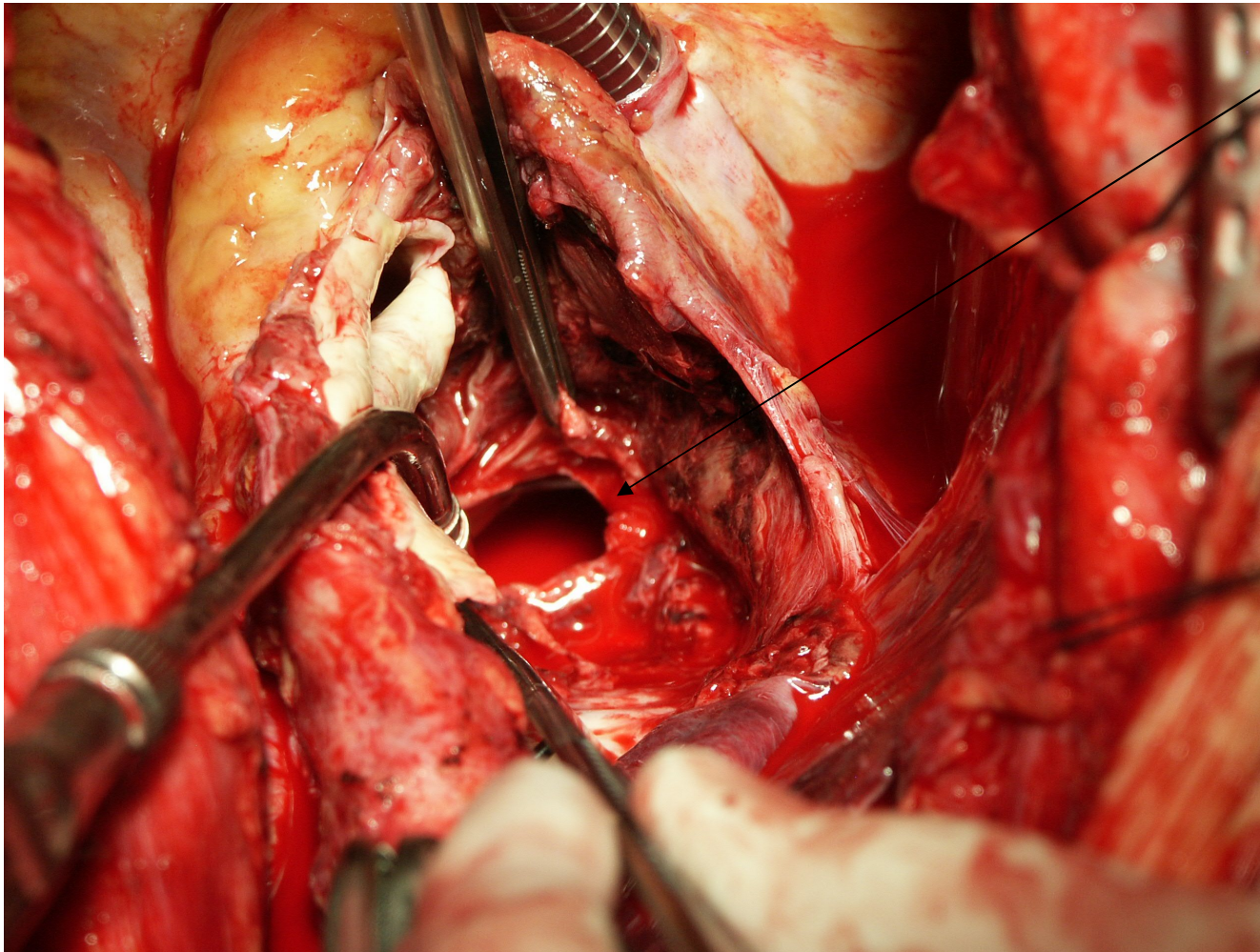
Right atrium

Surgery

Opened aneurysmal sac, blood clots are extracted from the false lumen of the ascending aorta



Surgery



3 cm large opening in the base of the left atrium, which was a communication between the false lumen of ascending aorta and left atrium

Postoperative course

- Patient recovered well after surgery and after 10 days was discharged home

Marfan syndrome?

- Because of marfanoid habitus (tall, slim man, 187 cm, 66 kg, long extremities with arachnodactylyia, lower placed ears) we suspected Marfan syndrome
- Mutations of the FBN1 a FBN2 genes were not found



Conclusions

- The history and clinical findings detracted us from the correct diagnosis (febrile illness, ST elevations, positive troponin and inflammation markers)
- If we did not find the structure in the left atrium, which lead to transesophageal echo, patient would be discharged home with the diagnosis of acute perimyocarditis; another attack of dissection would be probably fatal