

# Left atrial mass

## Salzburg Weill Cornell Seminar in Anesthesiology and Intensive Care - 2024

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# Patient history

- 52 year old female with symptoms of persistent fatigue, dyspnea and cough in the last 9 months
- PMH: Hypertension (tabl. Lisinopril 10 mg 1x1)
- Pre admission work-up:
- Labs – ↓ Hgb 103 g/L, the rest normal
- Contrast CT: The heart is of normal size without pericardial effusion, but there is a large, clearly limited and hypodense defect in opacification of the left atrium, 4x4 cm in the axial plane.
- Cardio exam: on TTE noted left atrial mass that takes up  $\frac{3}{4}$  of the LA



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CT

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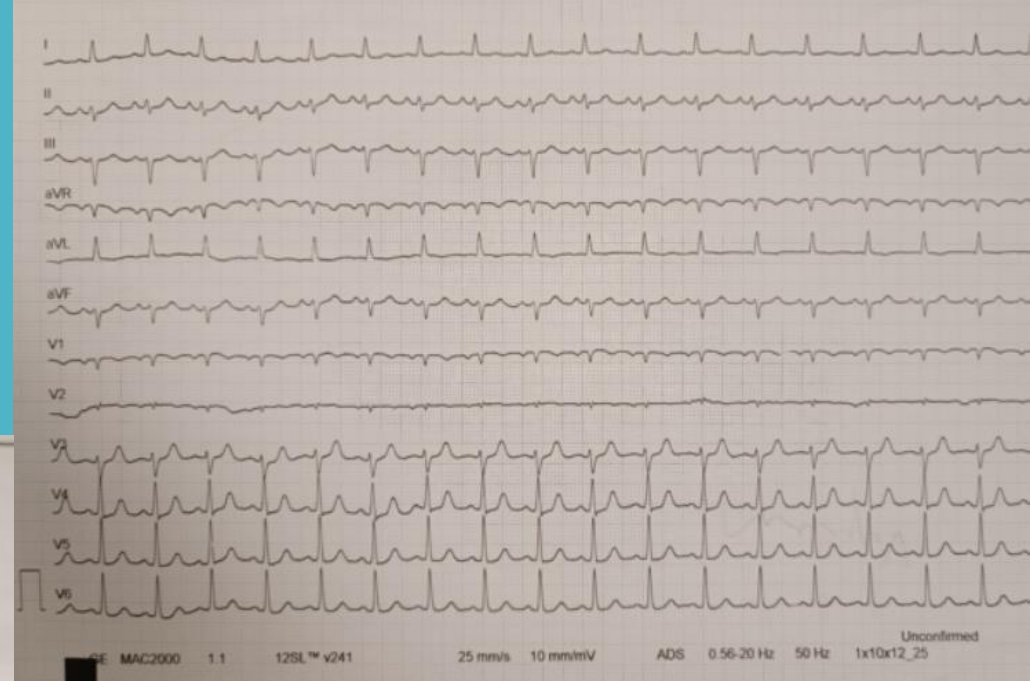
# Indication for operation

- In the left atrium there is a spherical mass with an area of  $13 \text{ cm}^2$ , attached to the basal third of the interatrial septum, which fills  $3/4$  of the left atrium, is mobile and prolapses through the mitral valve in diastole and compromises the filling of the left ventricle
- DDg: thrombus, tumor
- Patient was admitted for cardiosurgery treatment

# Preoperative assessment

- History (HTN)
- Physical examination, Vitals
- Labs (HGB 100 g/L, RBCs  $3.67 \times 10^{12}/L$ )
- Blood type and order
- Microbiologic investigations
- ECG (no abnormal findings)
- Echocardiogram (LA mass, EF=59%)
- Carotid ultrasound
- CXR
- ABG
- ACT (168s)
- Airway assessment (Mallampati 2)

Blood gas values		
pH	7.478	
pCO <sub>2</sub>	37.1	mmHg
pO <sub>2</sub>	74.7	mmHg
Oximetry values		
ctHb	10.0	g/dL
sO <sub>2</sub>	96.4	%
FO <sub>2</sub> Hb	94.7	%
FCO <sub>2</sub> Hb	1.4	%
FtHb	3.5	%
FMetHb	0.4	%
Electrolyte values		
cK <sup>+</sup>	3.4	mmol/L
cNa <sup>+</sup>	143	mmol/L
cCa <sup>2+</sup>	1.22	mmol/L
cCl <sup>-</sup>	104	mmol/L
Metabolite values		
cGlu	4.9	mmol/L
cLac	0.4	mmol/L
cBil	3	μmol/L
Temperature-corrected values		
pH(T)	7.478	
pCO <sub>2</sub> (T)	37.1	mmHg
pO <sub>2</sub> (T)	74.7	mmHg
Oxygen status		
ctO <sub>2c</sub>	13.3	Vol%
p50 <sub>c</sub>	22.18	mmHg
Acid-base status		
cBase(Ecf) <sub>c</sub>	3.9	mmol/L
cHCO <sub>3</sub> <sup>-</sup> (P.st) <sub>c</sub>	27.8	mmol/L

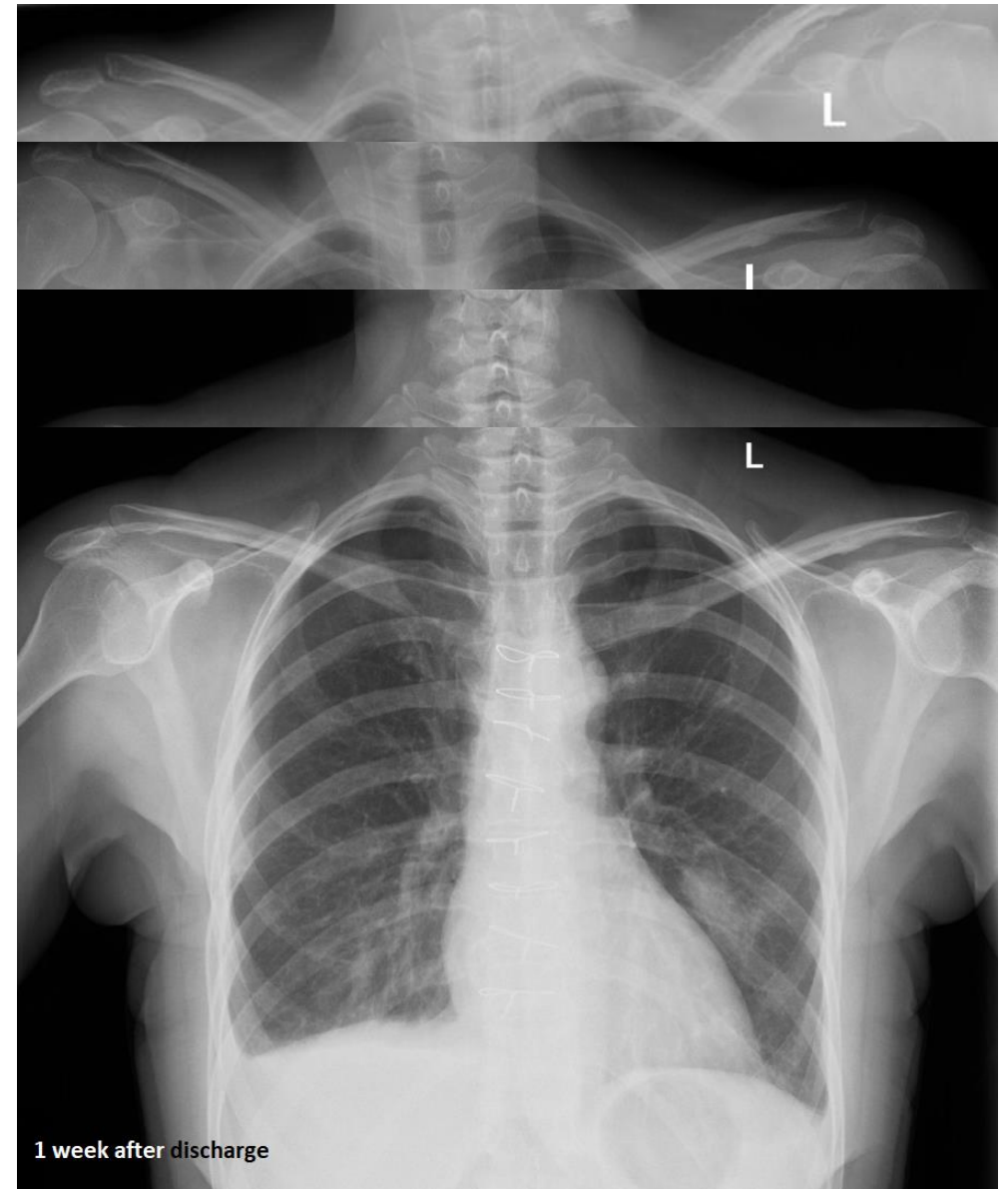


# Anesthetic approach

- Premedication (tabl. Diazepam 5 mg)
- Invasive blood pressure line – radial artery
- Induction (Midazolam, Fentanyl, Ketamine, Etomidate, Rocuronium), 7.5 ETT
- CVC – internal jugular vein
- Maintenance – inhalational anesthetic – Sevoflurane, opioide analgesic – Fentanyl and muscle relaxant - Rocuronium, Propofol – for sedation during CPB
- Antifibrinolytic agent – Tranexamic acid
- During CPB – administered 750 ml RBCs
- Intraoperative TEE
- Operation: Left atrial tumor extirpation & Interatrial septum reconstruction with xenopericardial patch

# Post-op

- 0 day – transfer to ICU, minimal catecholamine support, ABGs, sedation stopped after 4 hours, extubation after 8 hours, CXR – no complications, drainage 160 ml
- 2 day – transfer to ward
- 3 day – atrial arrhythmia, amiodarone added
- 4 day – control TTE – bilateral pleural effusions, placed pleurocath on the left side
- 5 day – discharge
- HPE & IHC – CARDIAC MYXOMA
- 1 week after discharge – right minimal pleural effusion



# CARDIAC MYXOMA - DISCUSSION



Most common primary tumor of the heart – but differential diagnostic challenge



Complications - arrhythmias, intracardiac flow obstruction, embolic phenomena (stroke/TIA or embolization to other organs, such as kidneys, spleen, aortic bifurcation, and the lower extremities)



May mimic other valvular abnormalities, such as mitral regurgitation, pulmonary embolism, tricuspid stenosis and tricuspid regurgitation



Definitive confirmation – pathology



THANK YOU