

Outside Your IO Comfort Zone: Learning from Our Saves and Complications

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Disclosures

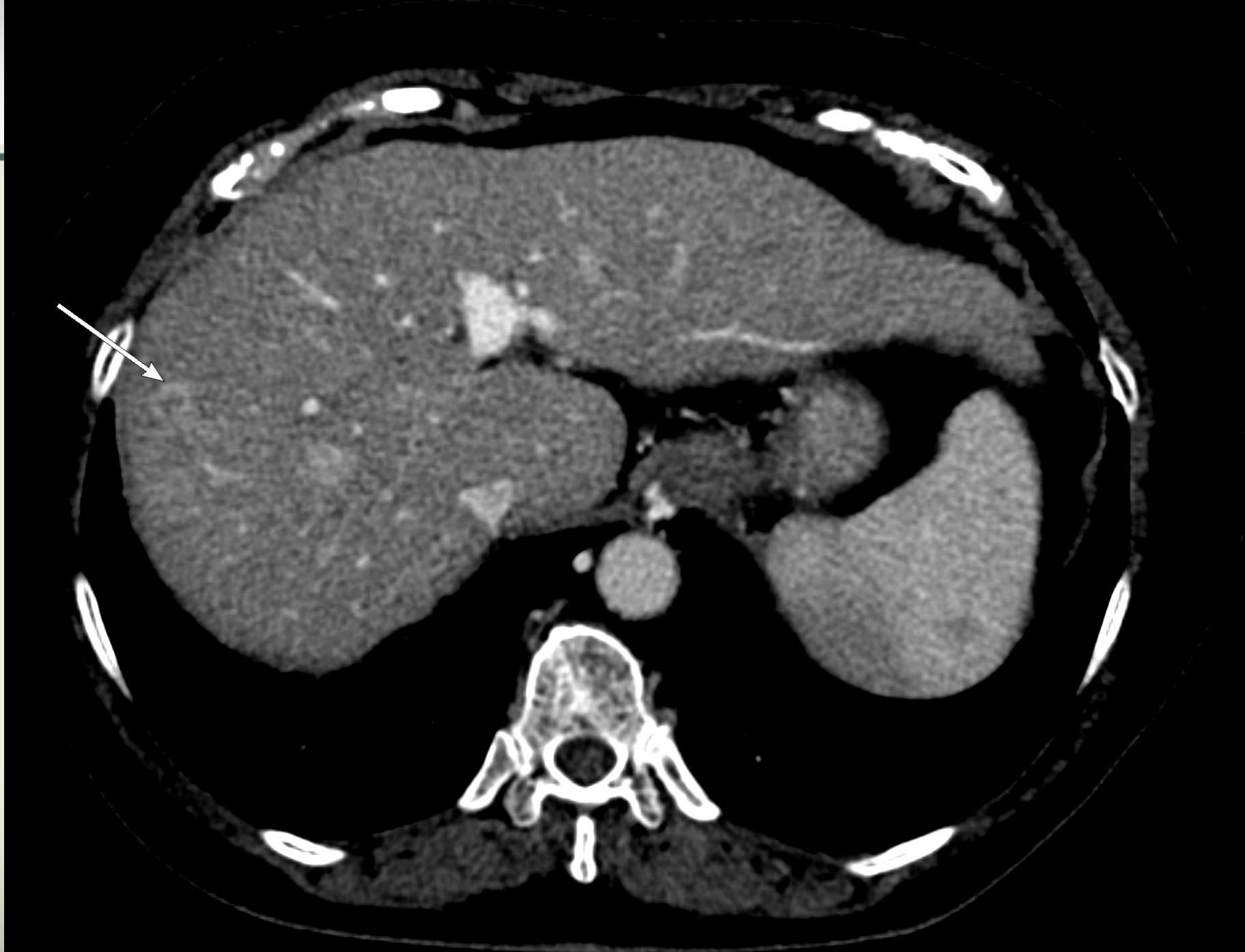
Consultant — Abbott Vascular, Baxter Healthcare Corporation, Bard Peripheral Vascular, Boston Scientific, W.L. Gore, Sirtex Medical, Guerbet, Eisai Medical, Trisalus, Astra Zeneca

Grants — Bard Peripheral Vascular, Boston Scientific, Sirtex Medical

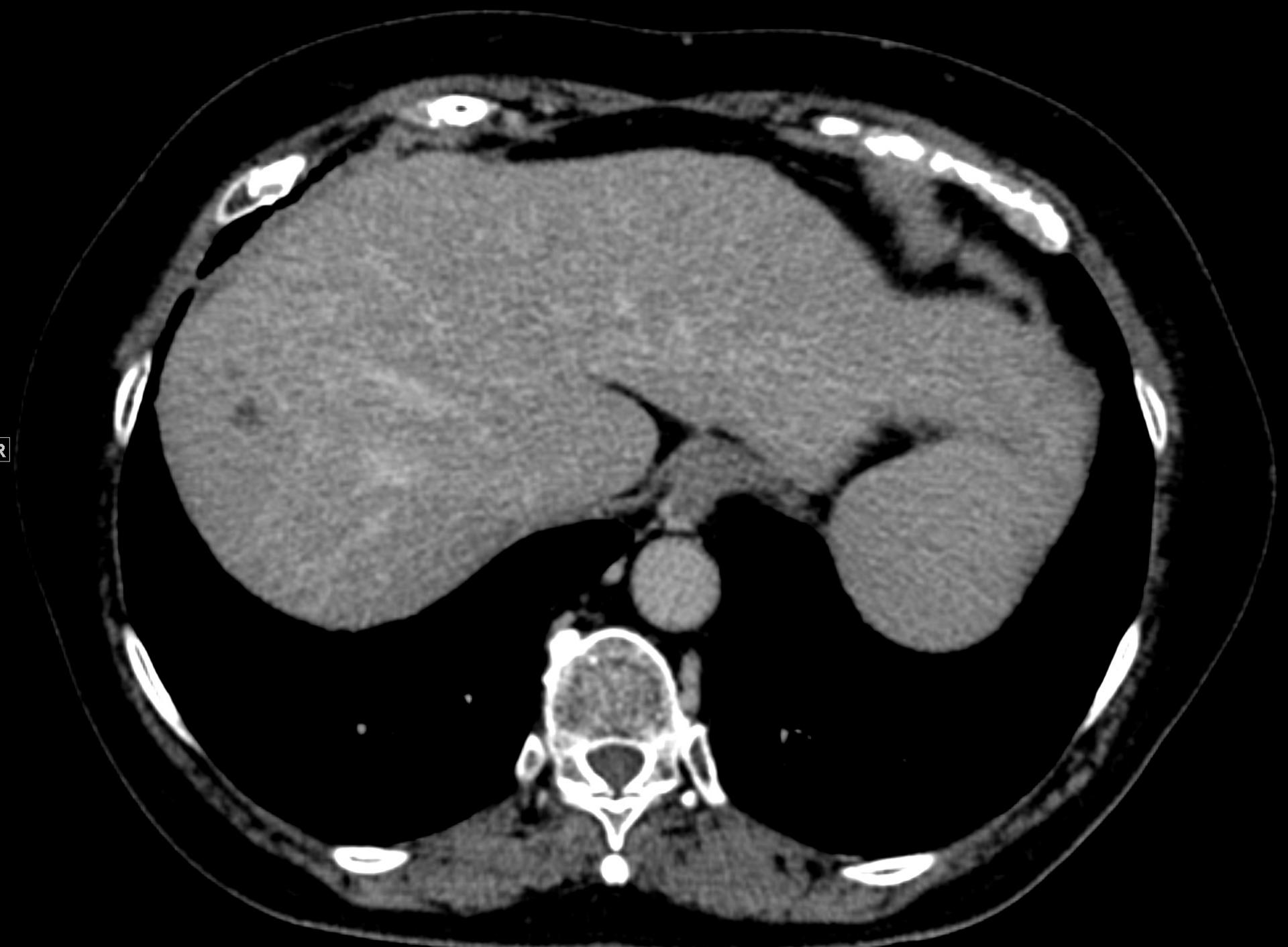
Clinical presentation

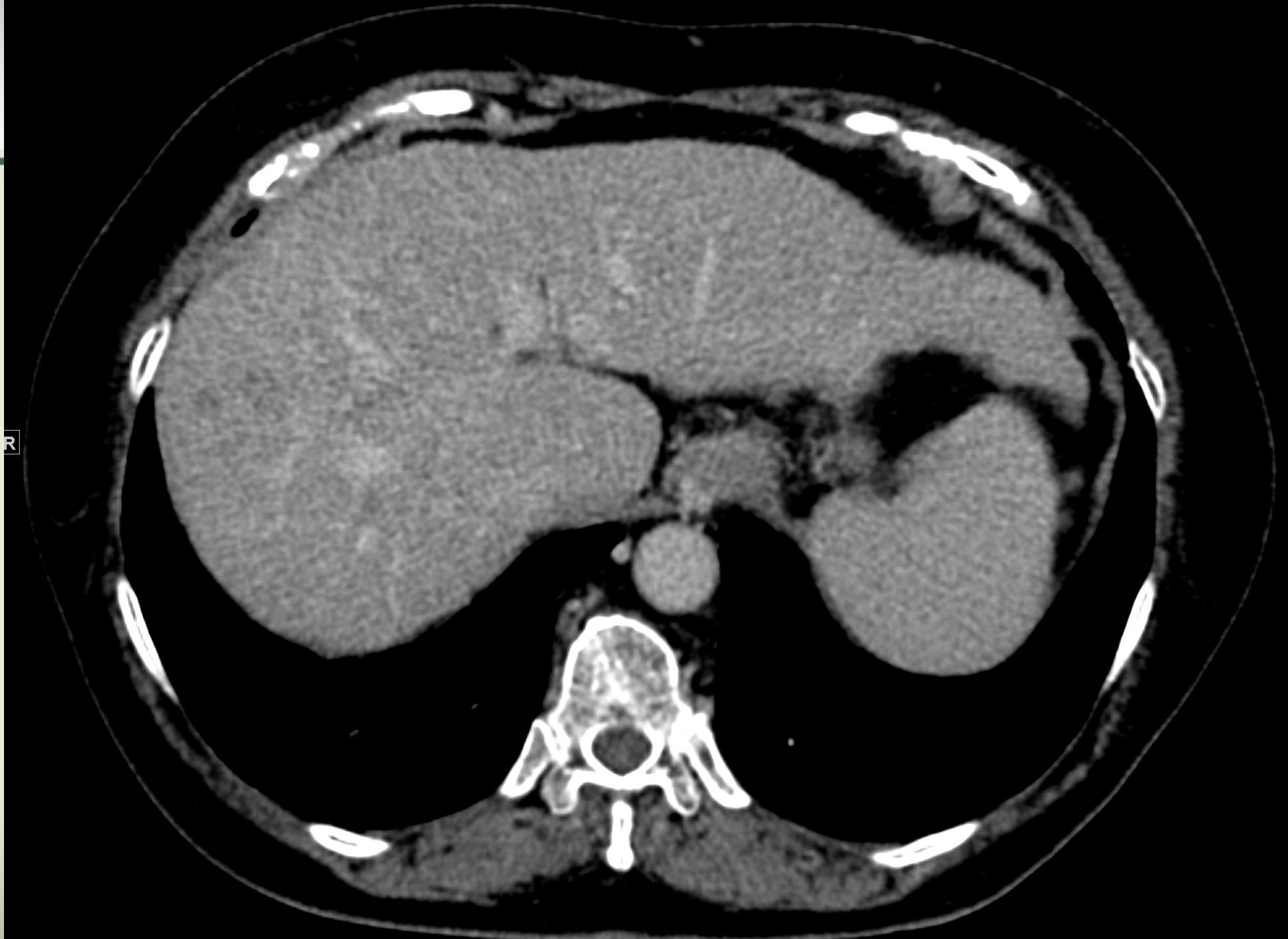
- 75 year old woman with NASH cirrhosis, portal HTN and esophageal varices.
- Patient was diagnosed with segment 8 HCC on surveillance CT showing arterially enhancing lesion wash out and pseudocapsule on venous phase.









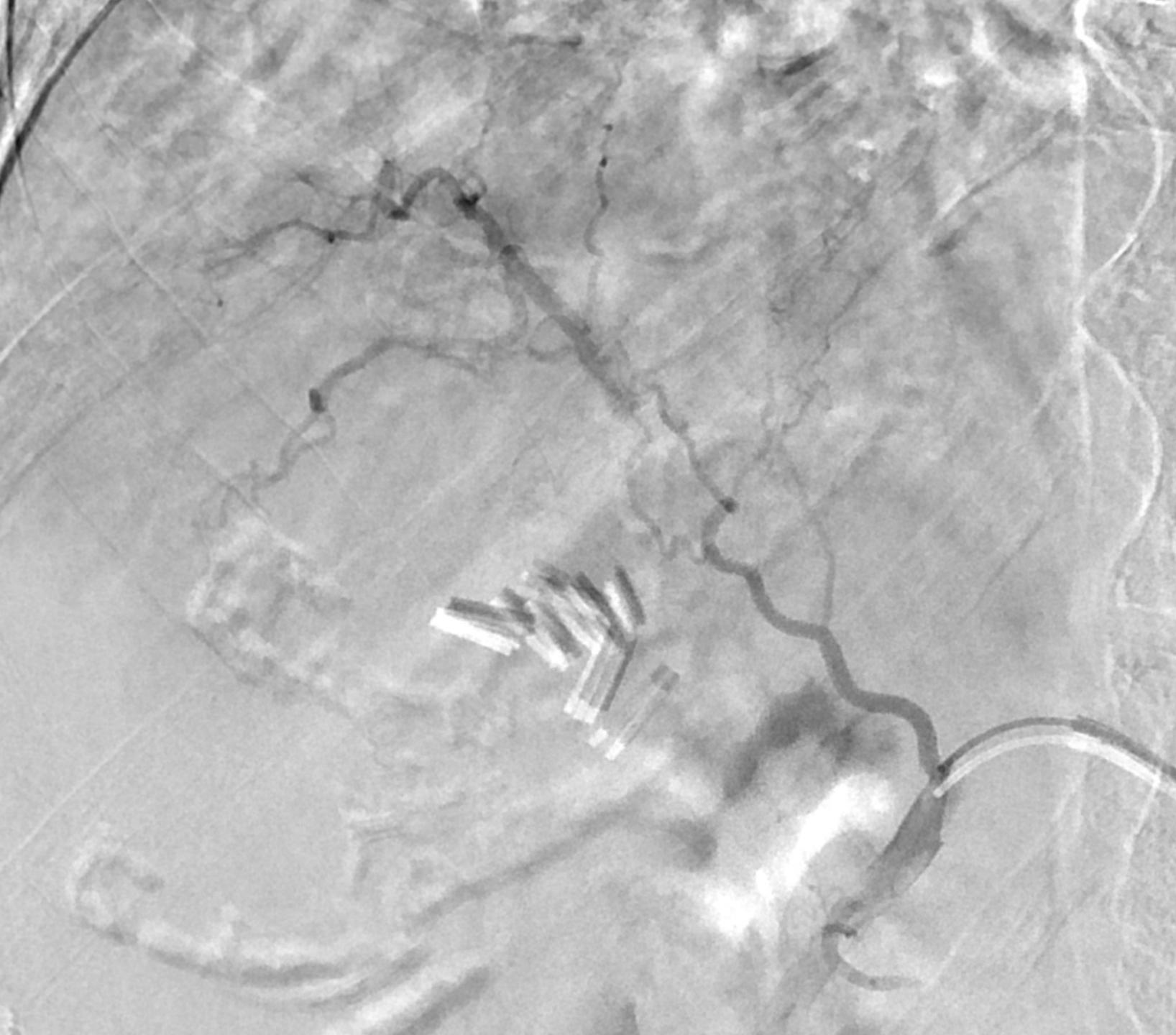


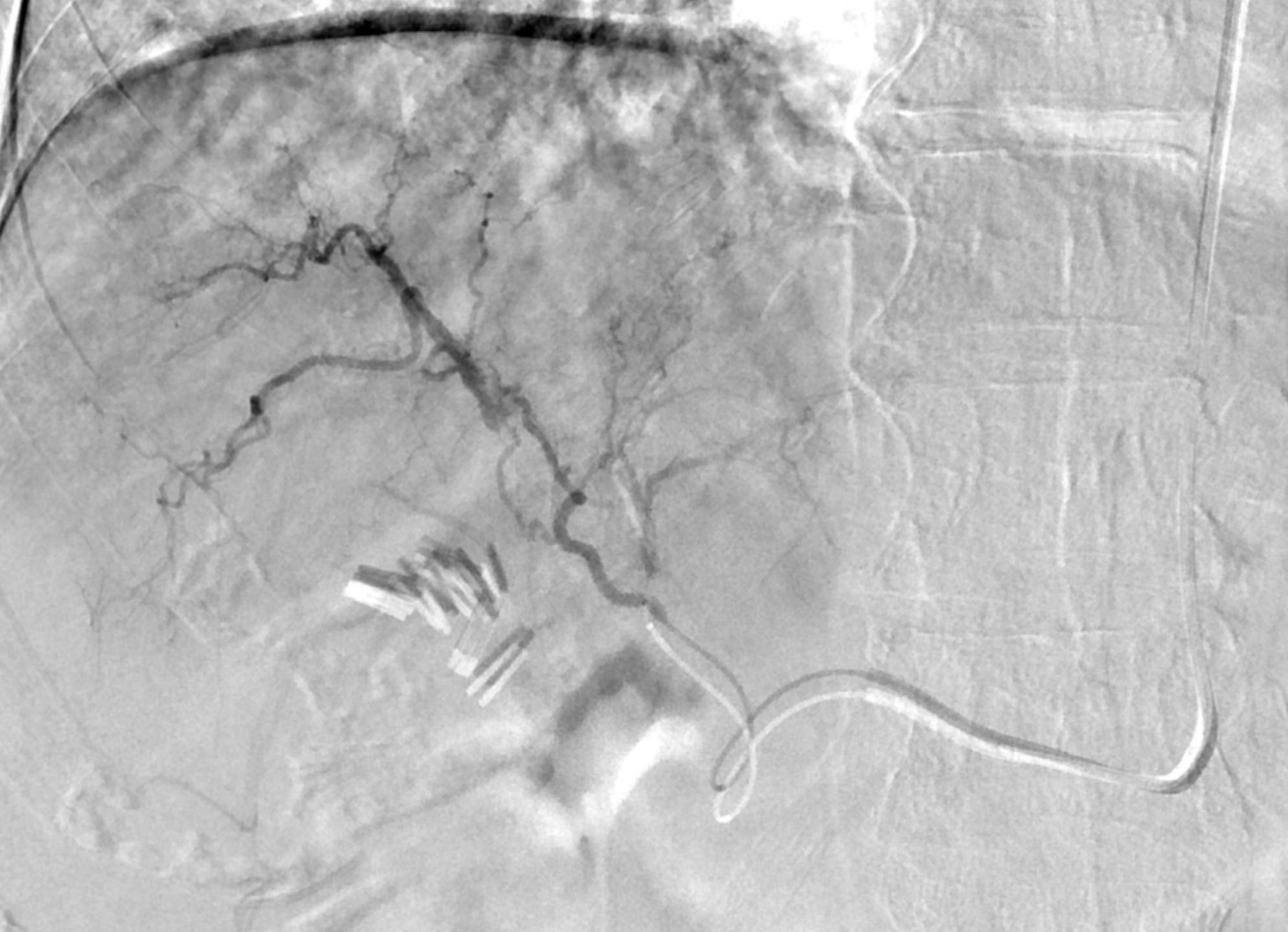
Tumor Board

- Patient underwent TACE of segment 8 lesion.











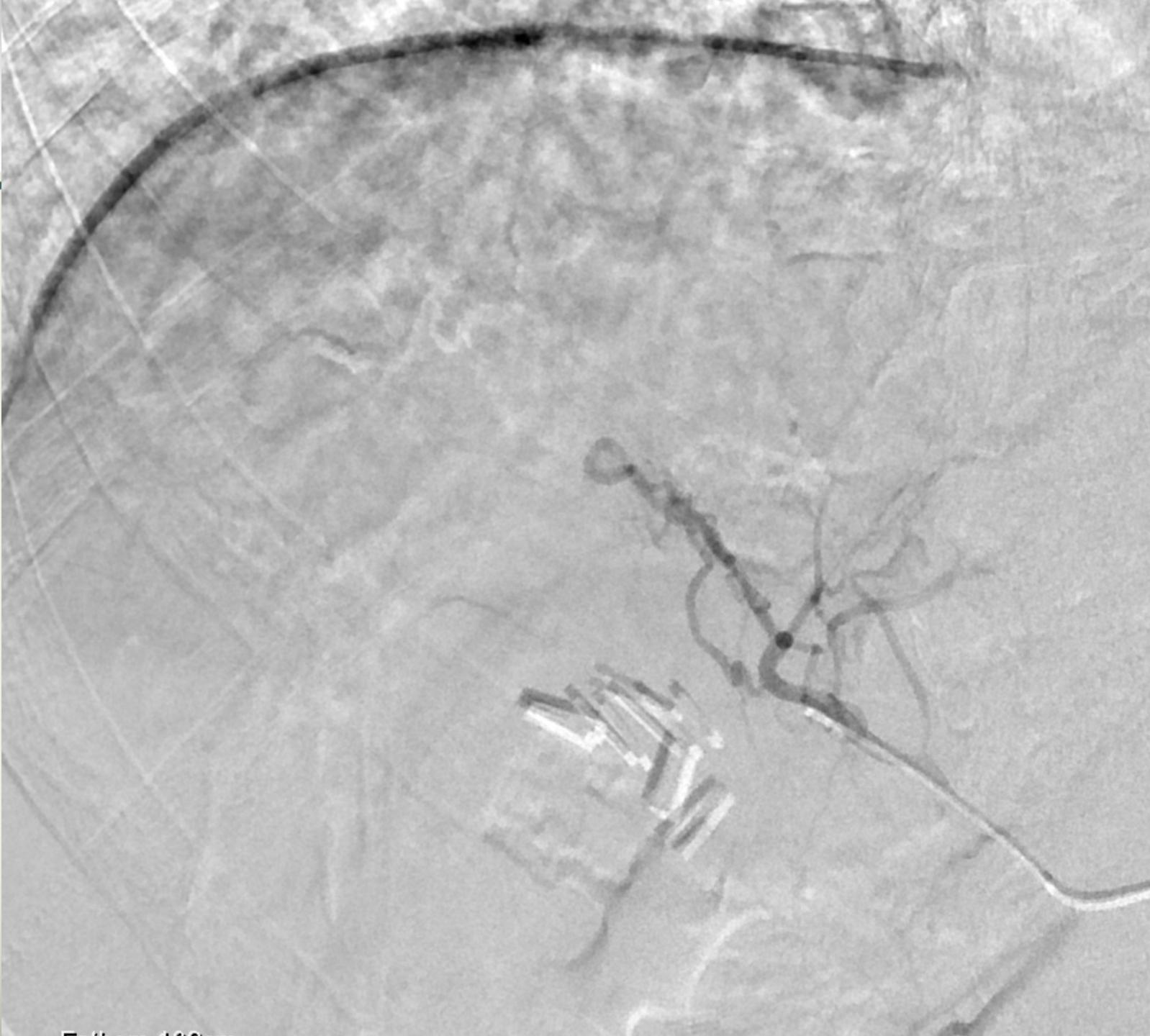


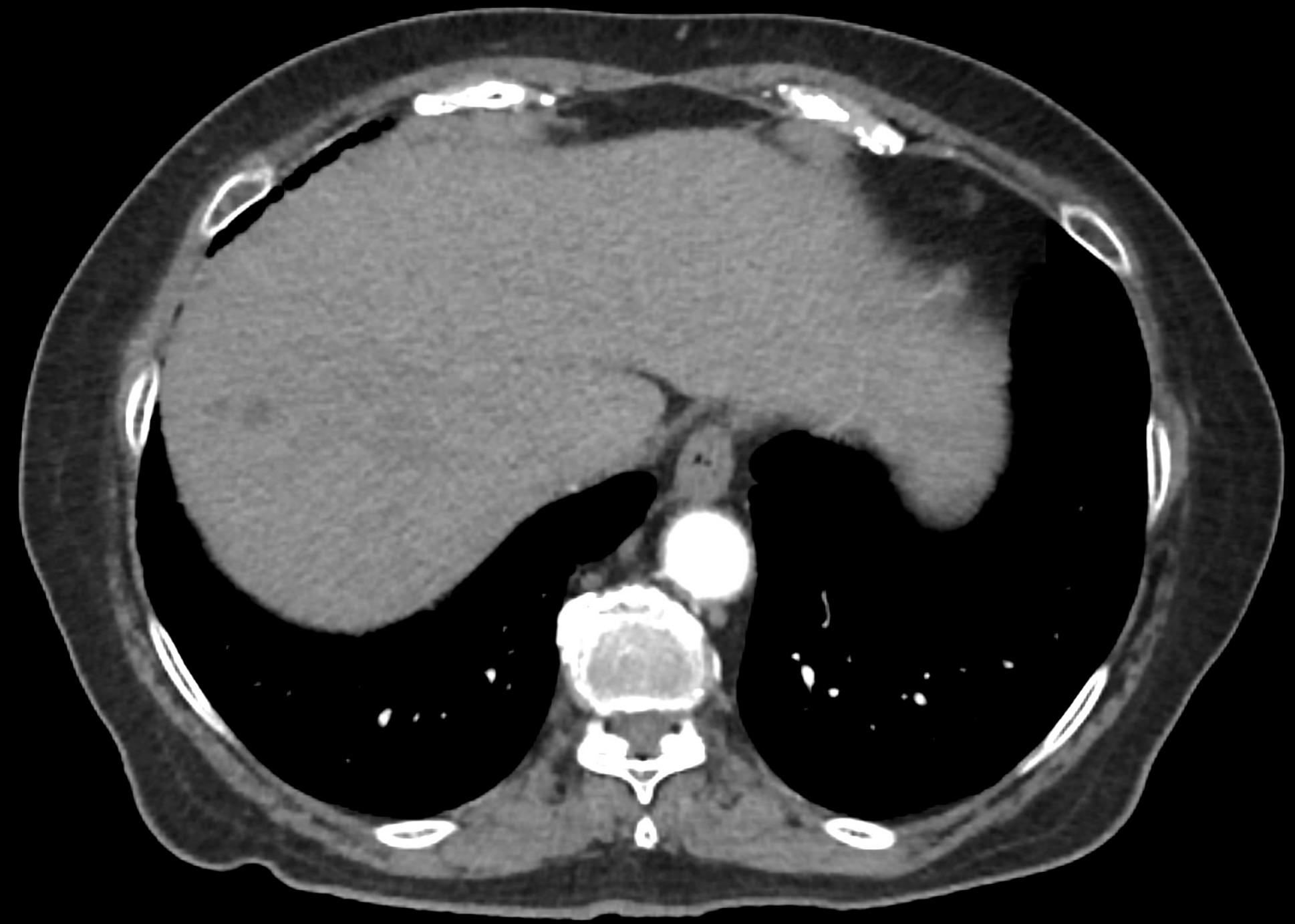
Figure 460



Follow up imaging

- Follow up triphasic CT of the abdomen revealed cystic consistent with tumor necrosis.



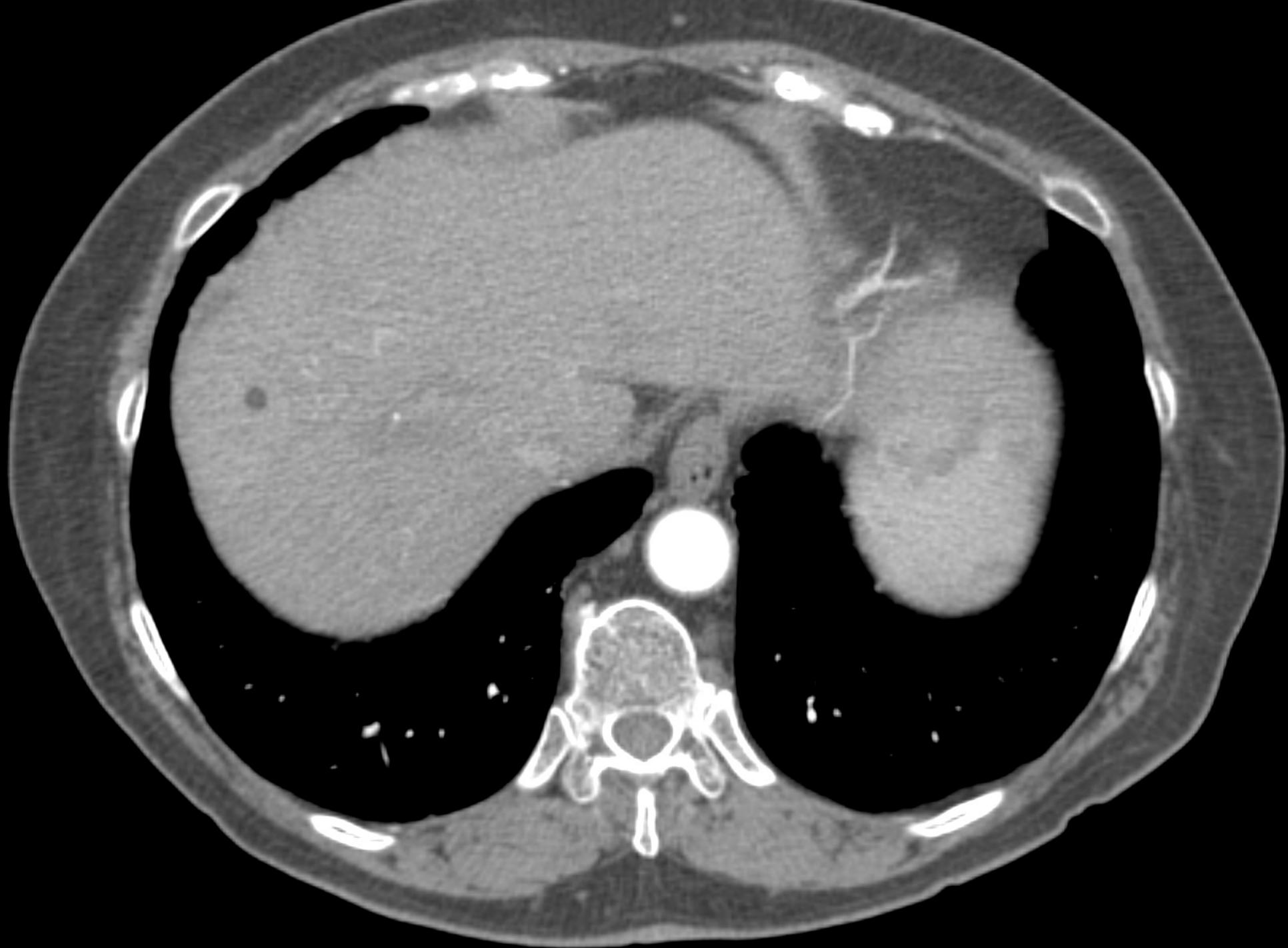






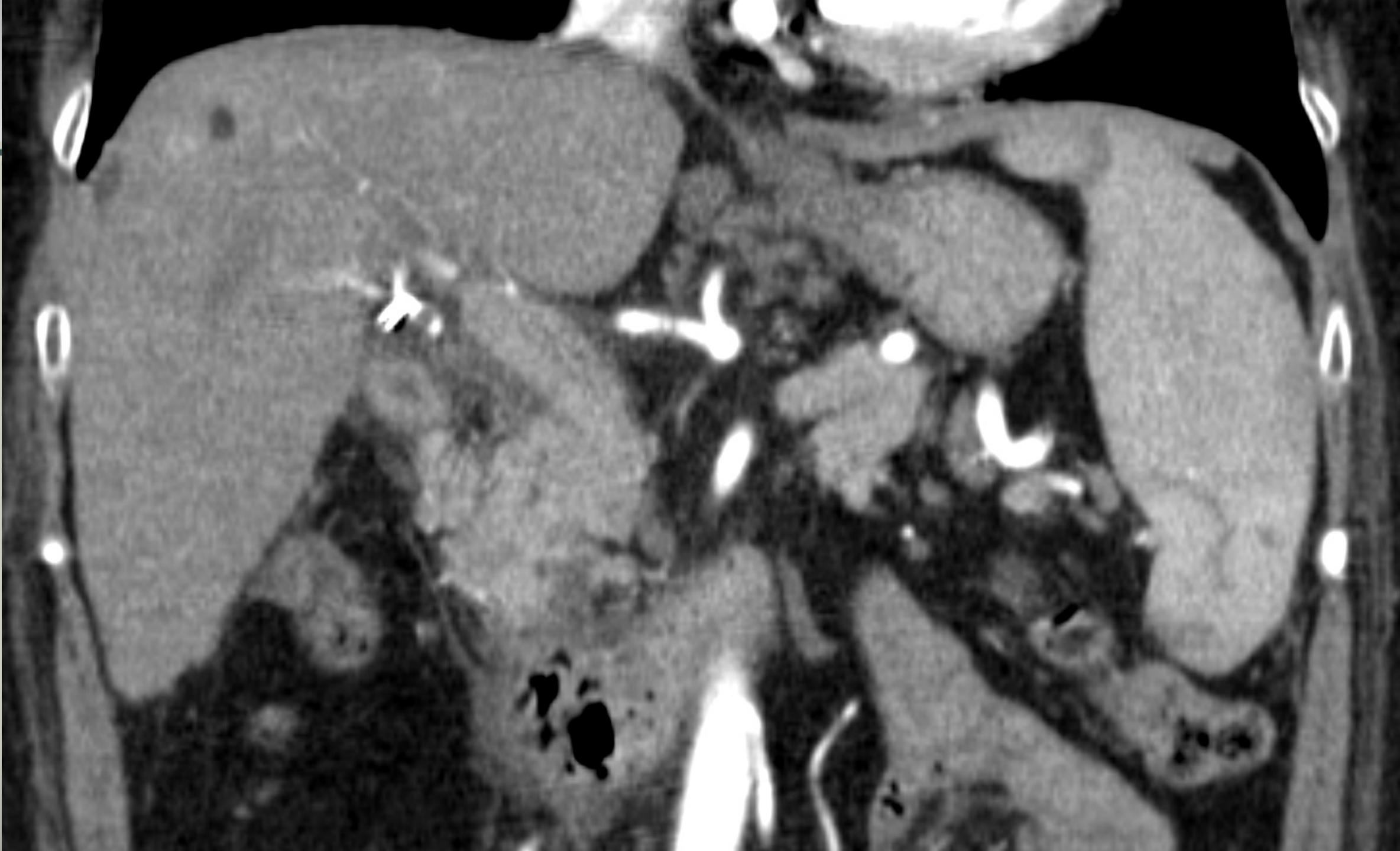
Surveillance

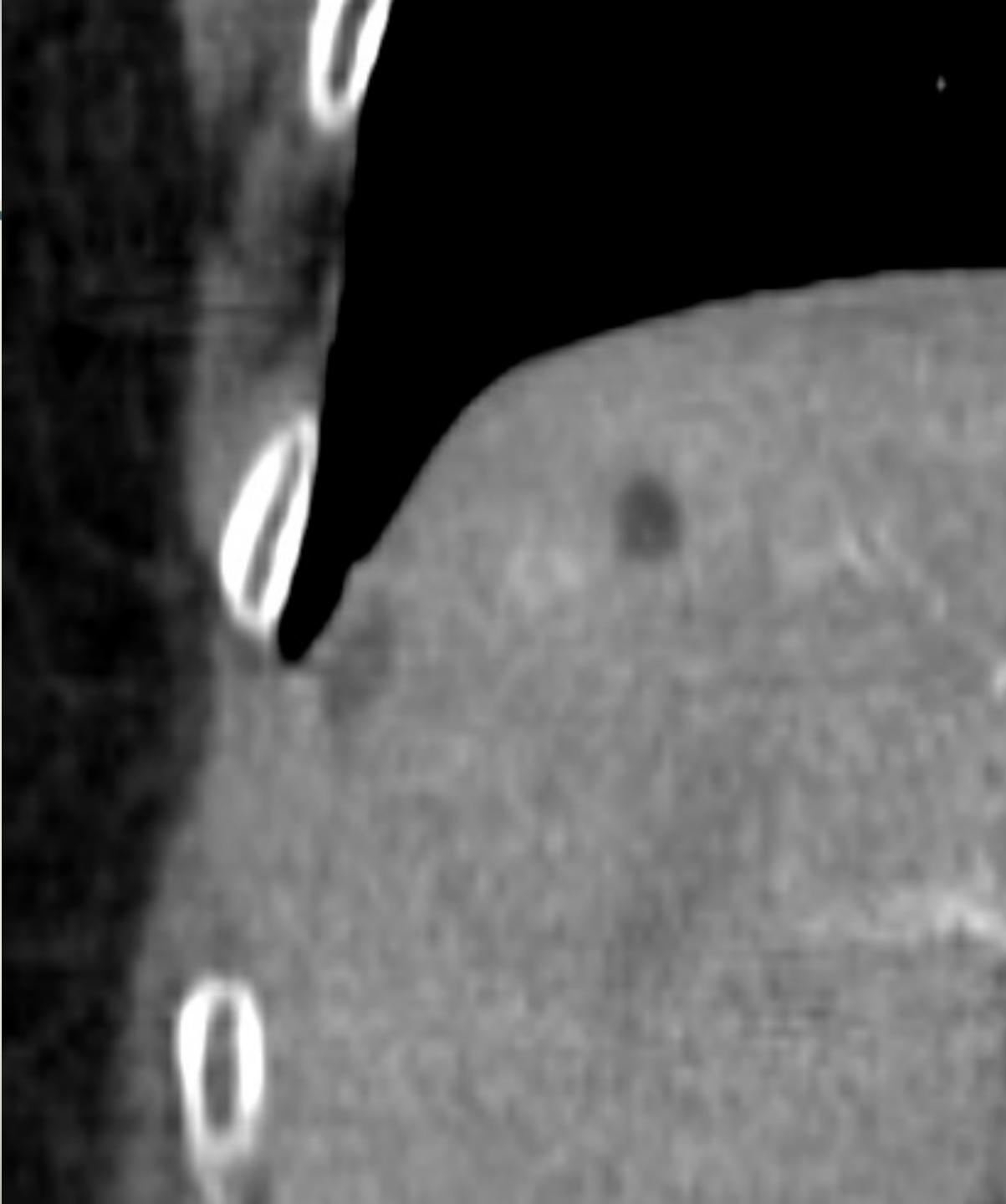
- Continued surveillance imaging showed similar findings
- 6 months later she underwent CT abdomen which revealed 1 cm arterially enhancing lesion with washout, adjacent to the cystic area, consistent with residual/recurrent viable tumor in segment 8









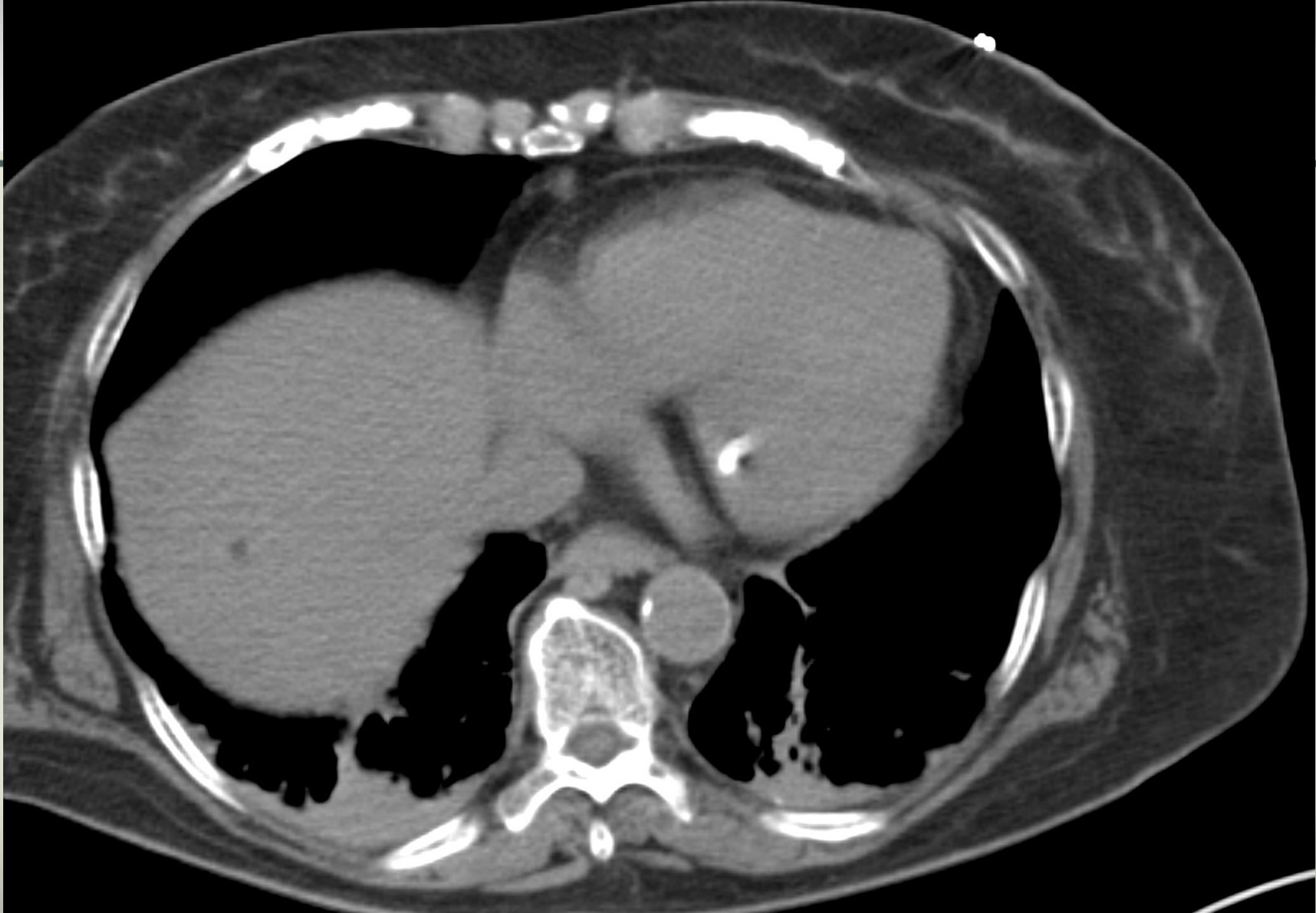


Tumor Board

- Tumor board decision was to perform ablation for the residual tumor.

Clinical presentation

- Child Pugh: A
- INR: 1.2
- Bilirubin: 0.7
- Albumin: 2.7
- ALT: 30
- AST: 31







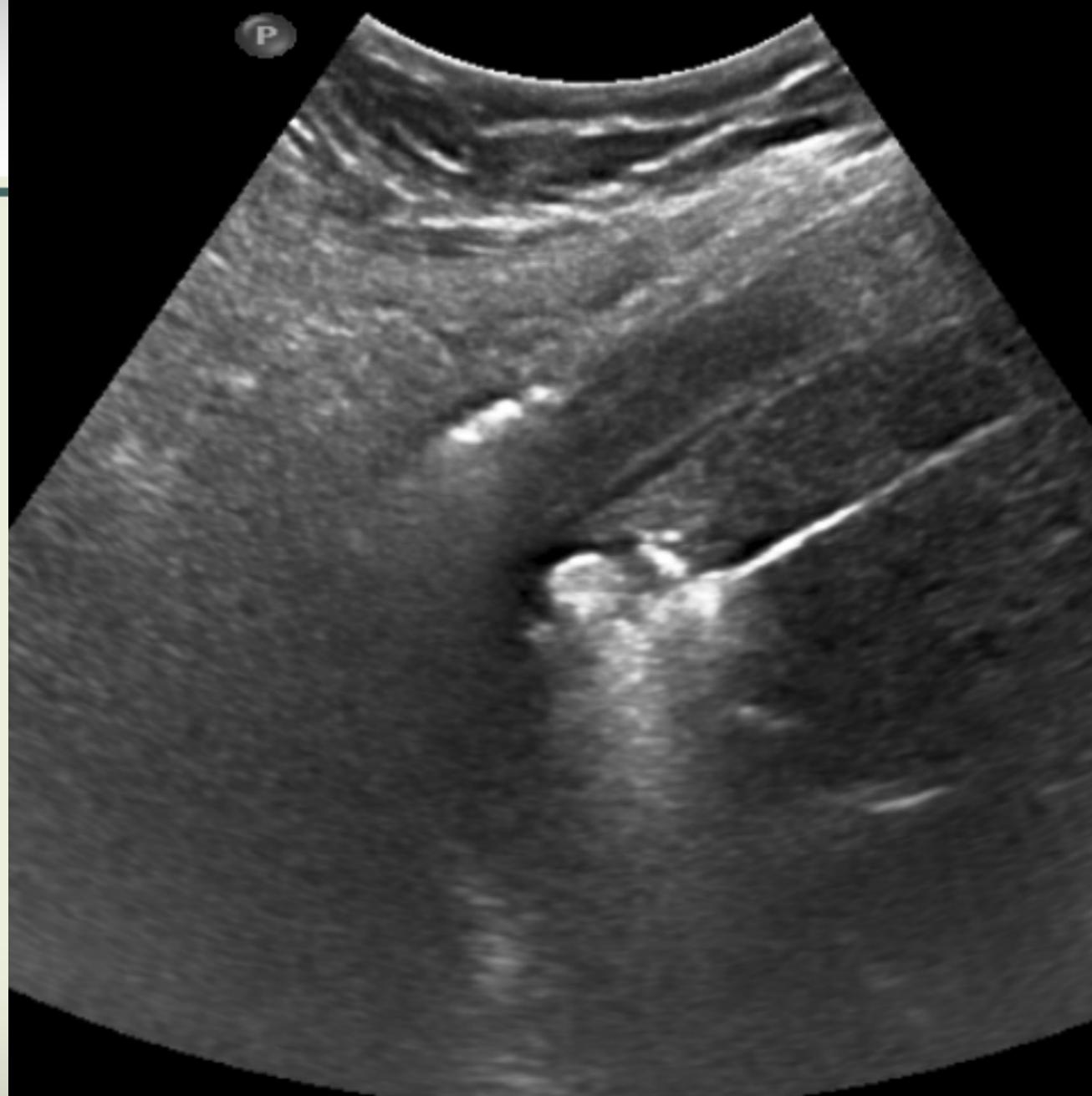








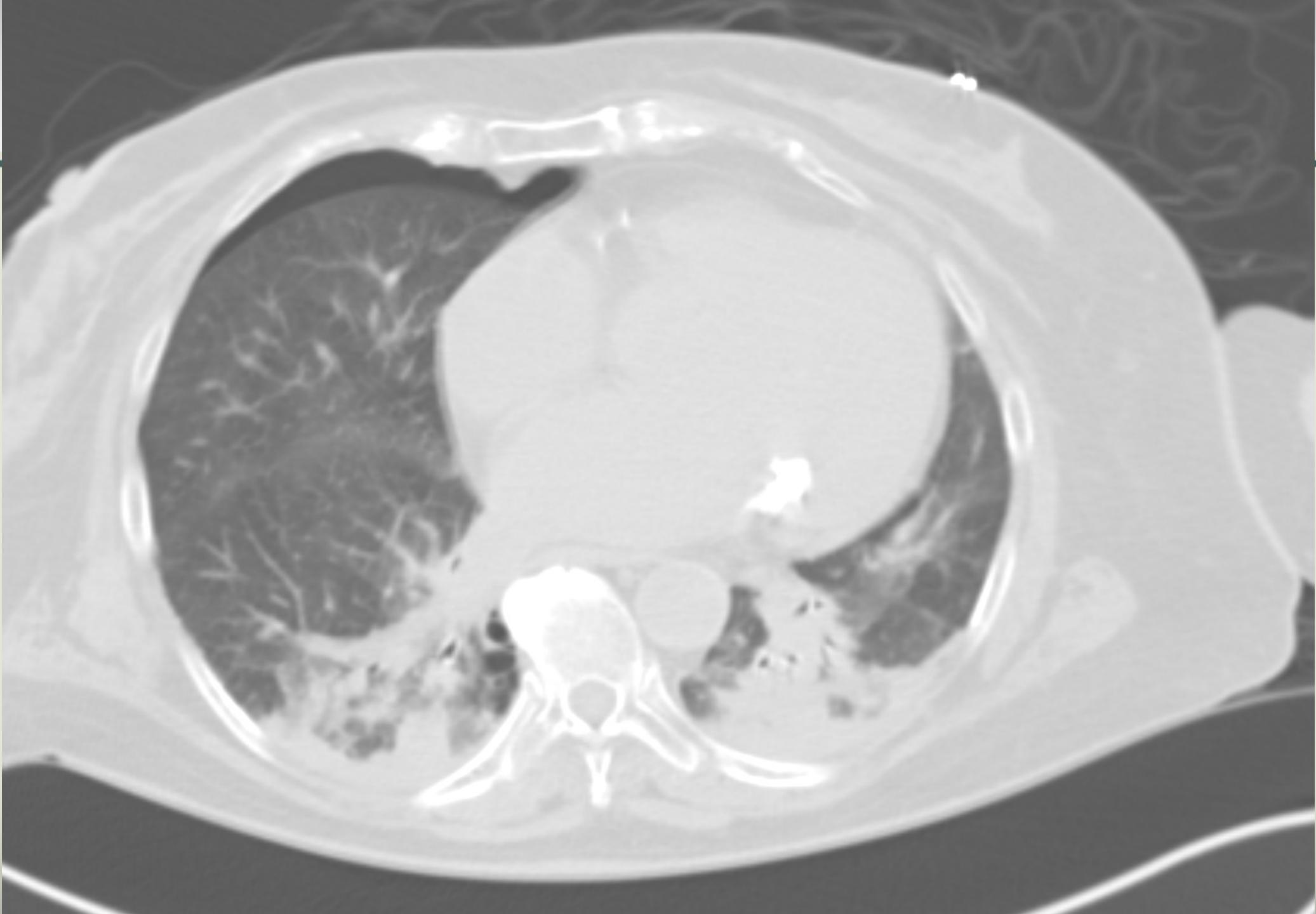
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Liver |

Clinical presentation

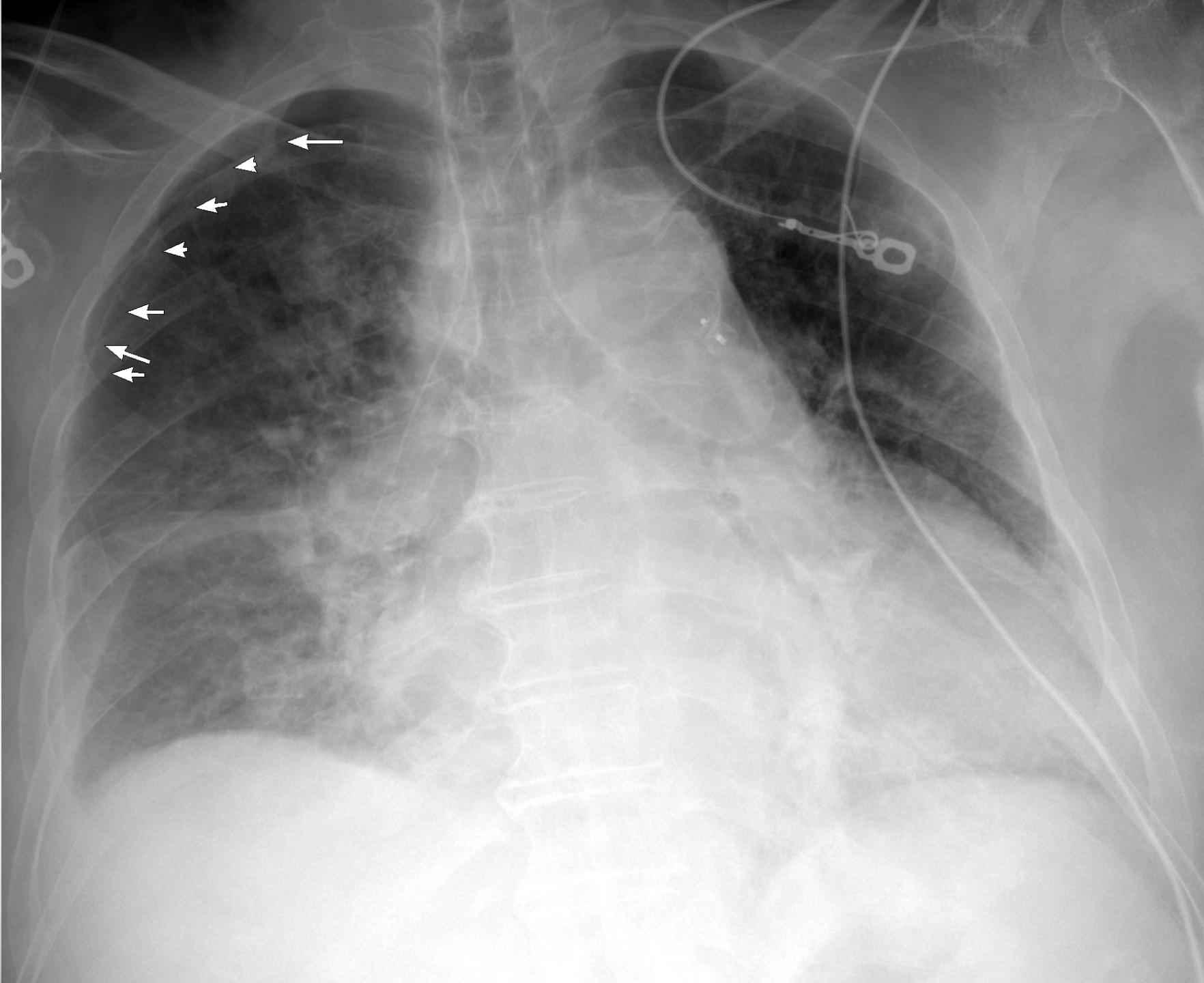
- Intra-procedural small volume pneumothorax was seen
- Decision was to manage conservatively and obtain chest x-ray every 1 hour.



Clinical presentation

- The patient remained stable
- The 1 and 2 hour chest x ray showed mild hydro pneumothorax



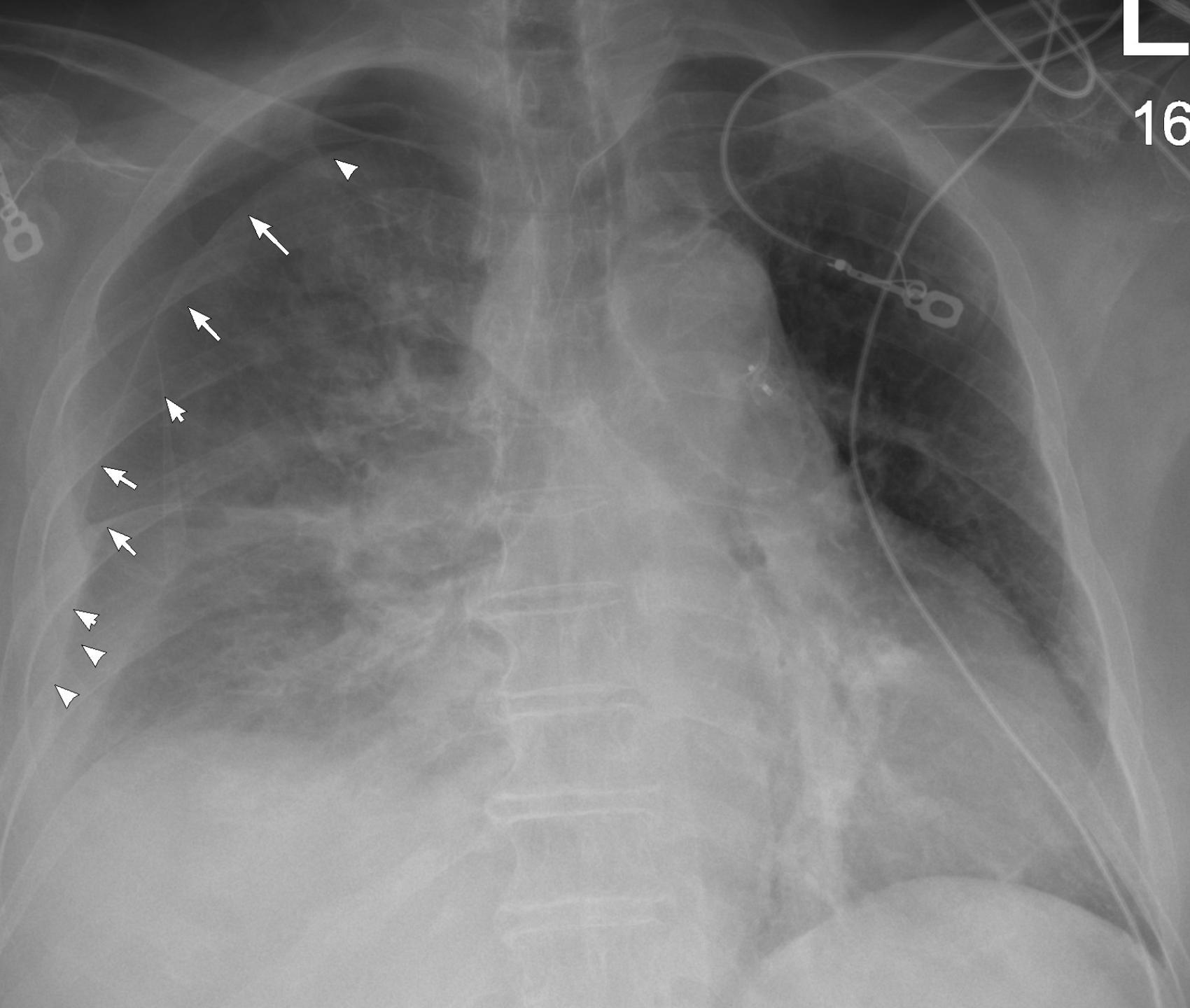


Clinical presentation

- The patient then started to have worsening dyspnea and hypoxia with decrease on O₂ SAT.
- The 3 hour chest x-ray revealed slight increase in pneumothorax.

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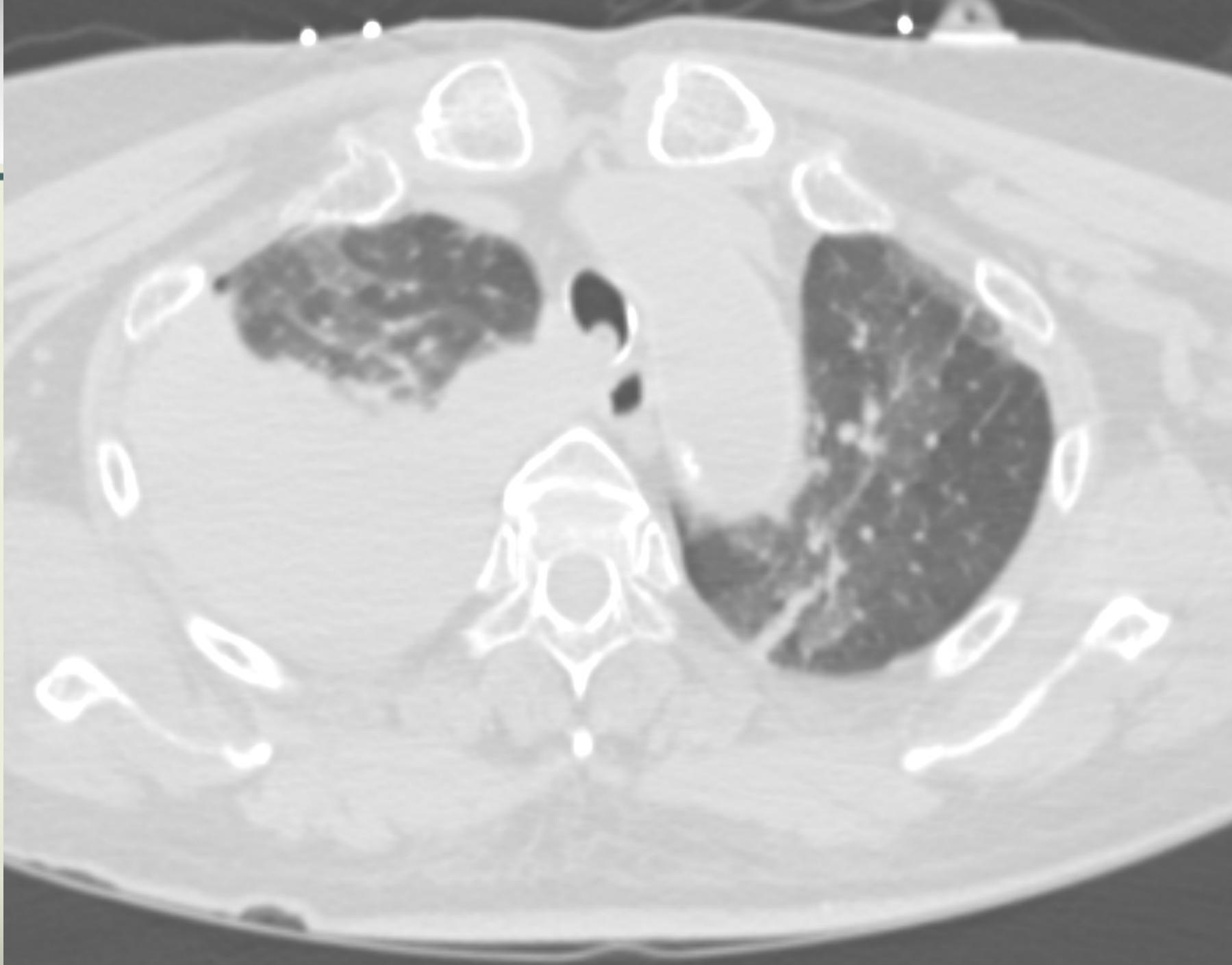
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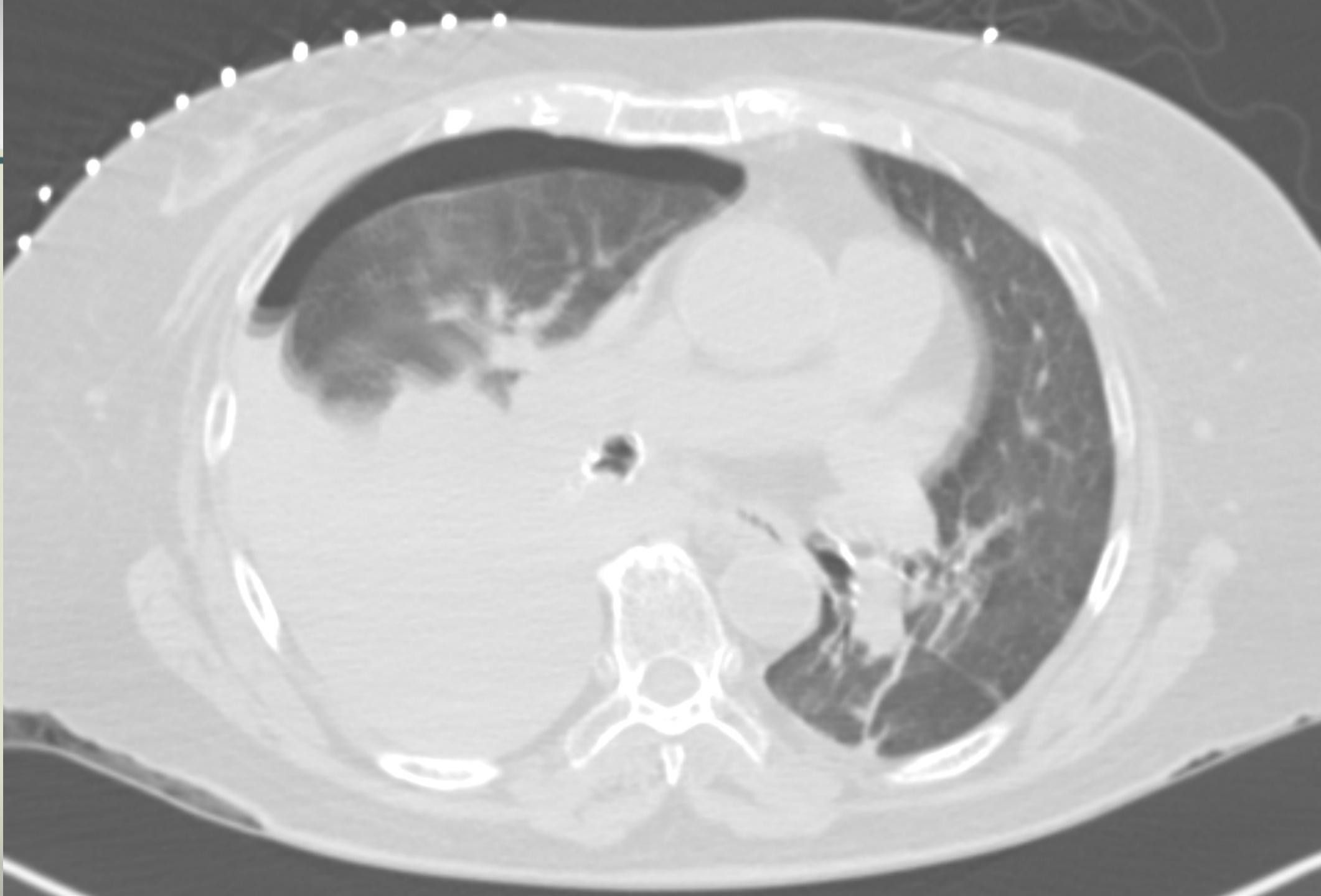


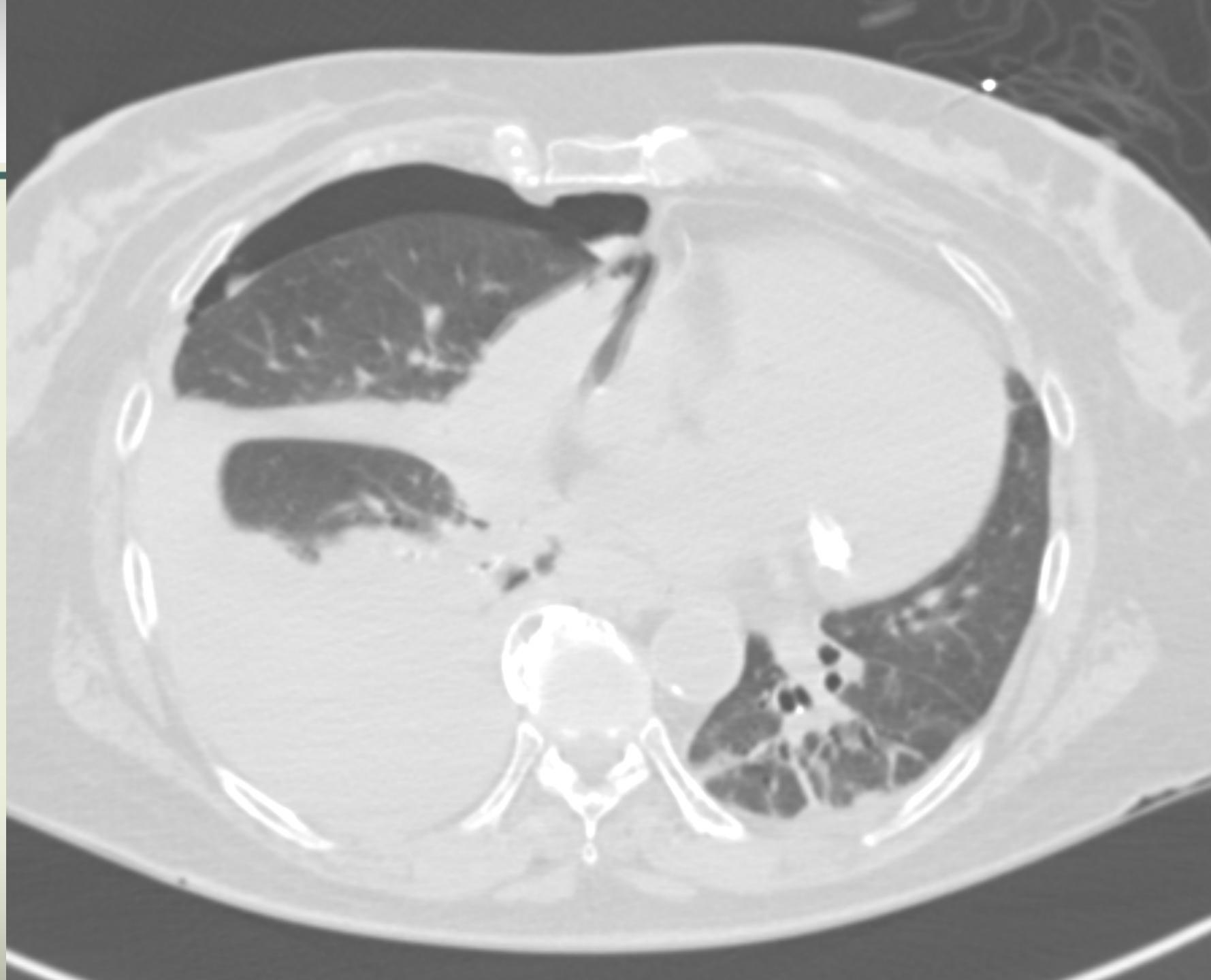
Clinical presentation

- The findings on the Chest x-ray did not correlate with the patient's clinical presentation.
- We decided to do a CT chest.









Clinical presentation

- There was significant hemopneumothorax
- We decided to immediately place a chest tube.





Clinical presentation

- 850 ml of blood was aspirated and the chest tube was connected to suction.
- Due to development of Hemopneumothorax, we performed CTA chest and abdomen with contrast.
- CTA chest and abdomen revealed no evidence of bleeding.

Clinical presentation

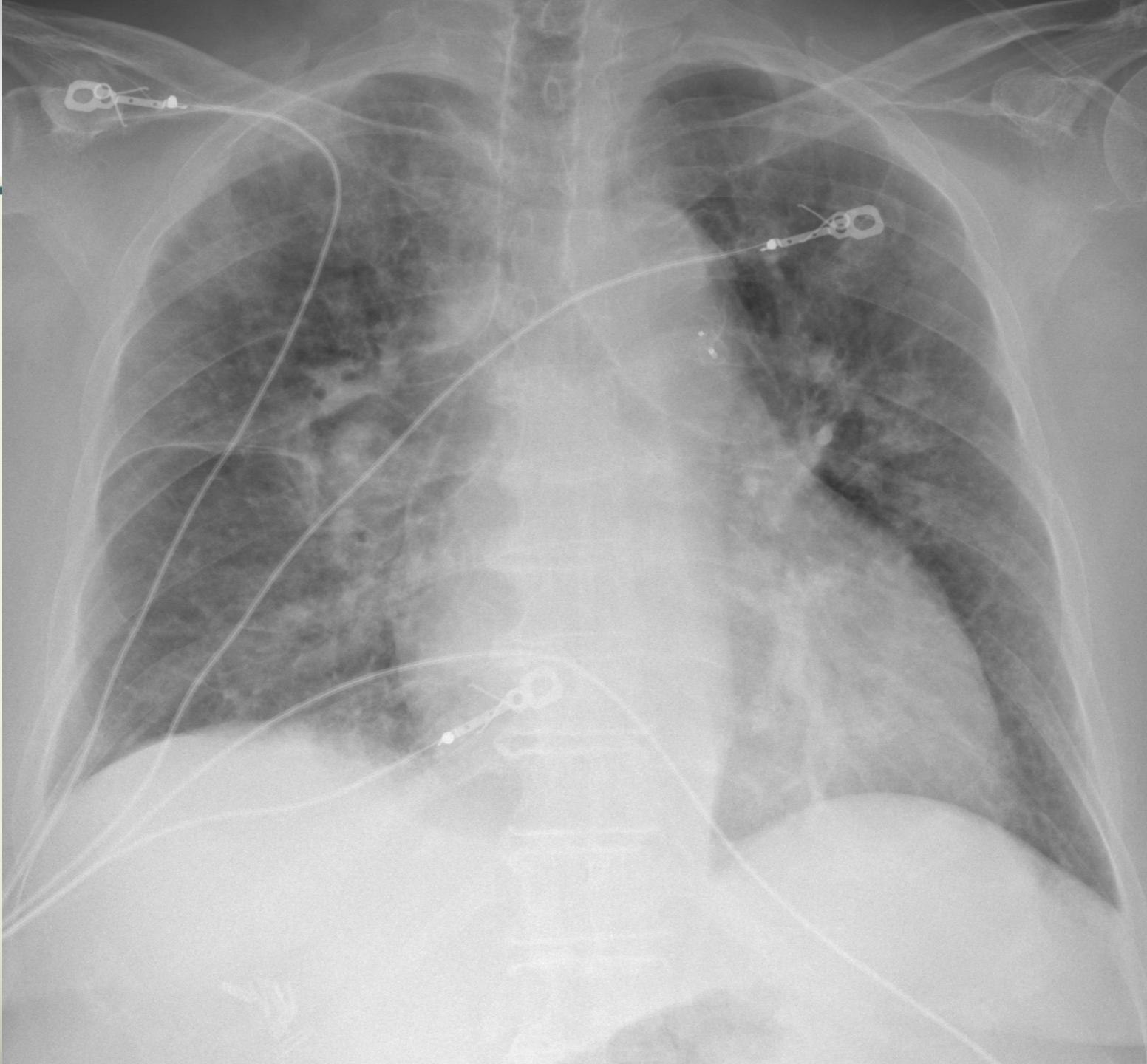
- Follow up chest x-ray was performed same day and showed re-expansion of the lung, resolution of hemothorax but persistent mild residual pneumothorax.



Clinical presentation

- Patient was then admitted
- Follow up chest x-ray was performed on the following day and showed persistent pneumothorax.
- Suction was increased.
- Follow up Chest x-ray revealed no residual pneumothorax.
- Chest tube was then removed.



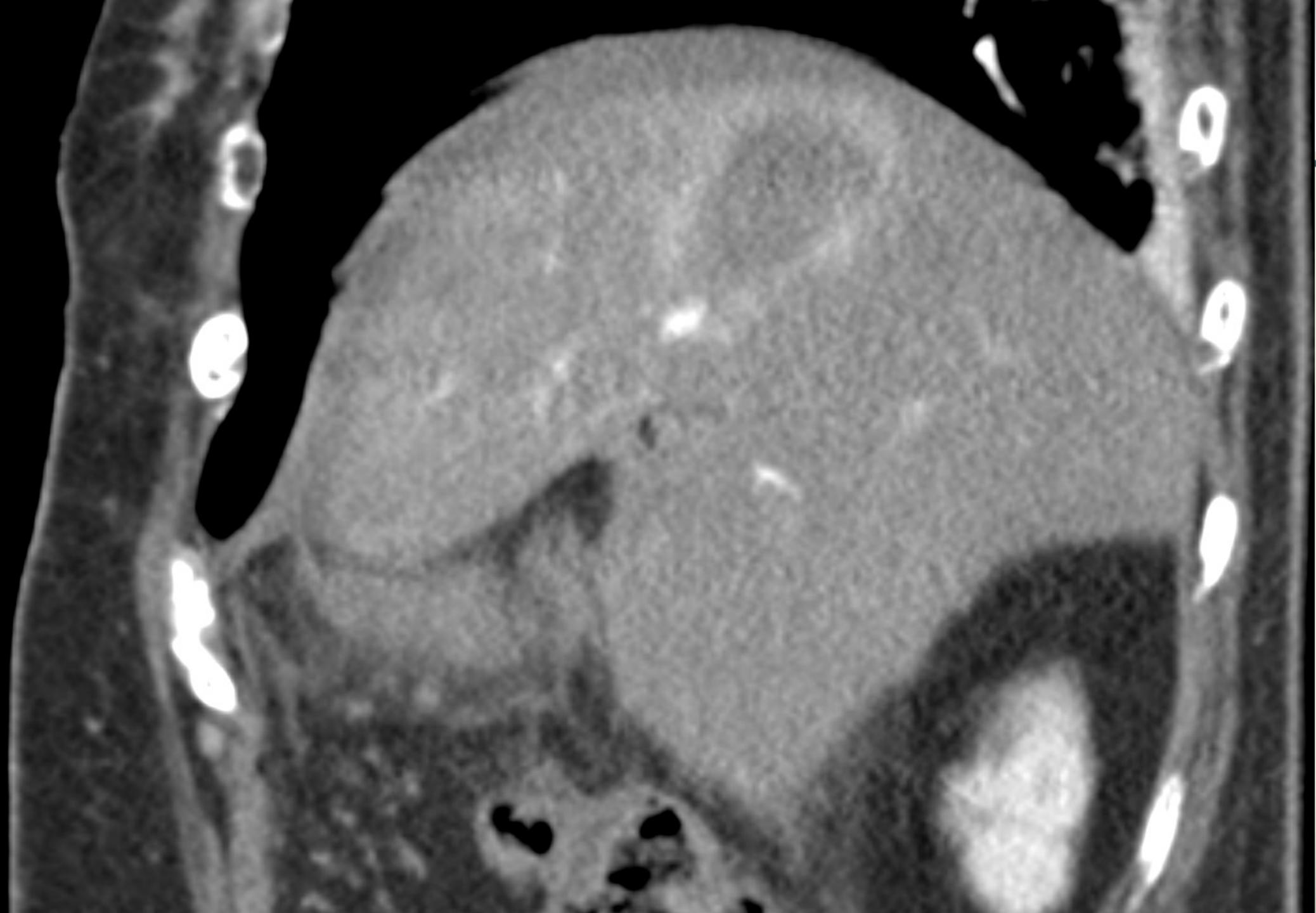


Clinical presentation

- Before discharge a CT chest and abdomen was obtained.







Complications of Microwave Ablation for Liver Tumors: Results of a Multicenter Study

- Study of 736 patients
- Major complications occurred in 22 (2.9%).
- Symptomatic pleural effusion requiring percutaneous drainage (n = 3)

Livarghi et al. Cardiovasc Intervent Radiol (2012) 35:868–874



- In difficult locations, real-time Ultrasound may help guide the initial needle stick to prevent inadvertent pass through pleura/lung.
- Apnea during needle advancement may also help.
- Use reconstructed coronal and sagittal images for planning and needle advancement.
- In case pneumothorax develops, watch the patient closely and rely on clinical condition of the patient as well as the chest x-ray.



Thank You

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