Post Embo Surprise

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60F with Small Bowel NET

- Diagnosed in 2015
  - Liver metastases at diagnosis
  - Liver biopsy Ki-67 index 1% (WHO grade 1)
  - Small bowel primary
  - 24-hr urine 5-HIAA 107 (normal < 15)
- 2015 - present octreotide LAR 20mg/mo
- 2018 - Lap right hemicolectomy and cholecystectomy

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60F with Small Bowel NET

- Diarrhea, 5-6 BM per day
- Occasional flushing
- ECOG PS 1

Labs

- WBC 7.6
- Hb 13
- Plt 200
- Cr 0.6
- T. Bili 0.3
- AST 44
- ALT 41
- Alk phos 130
- Albumin 4.1

24-hr urine 5-HIAA 42.7 (11/25/20)
43.1 (07/23/21)

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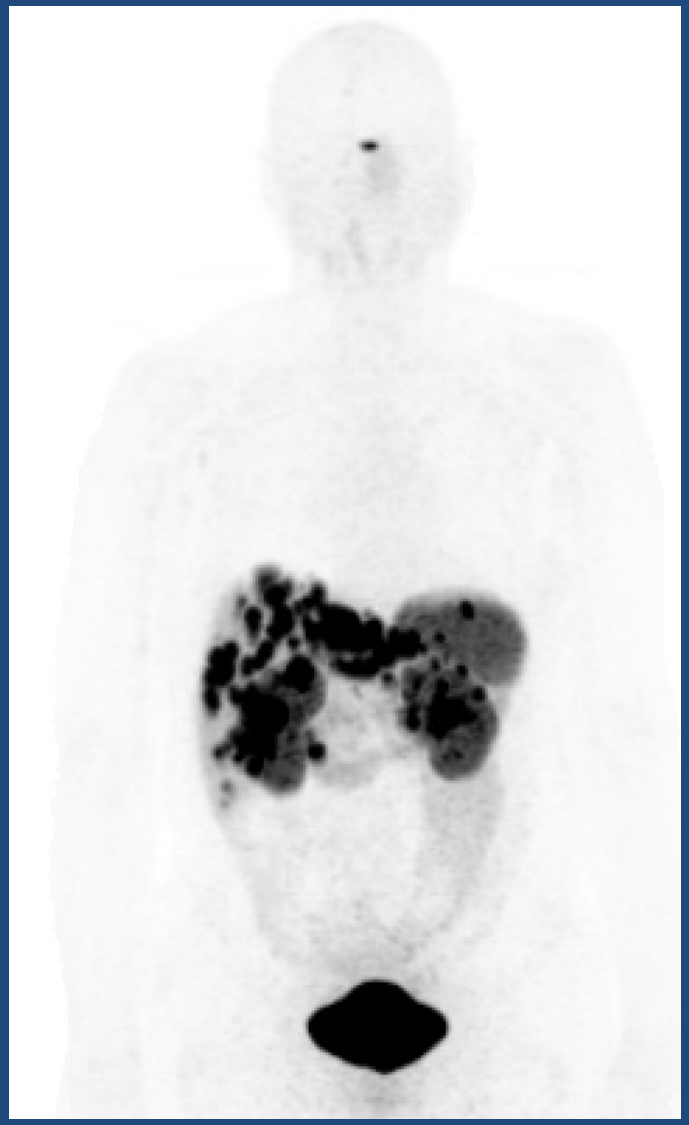
Ga-68 DOTATATE PET 11/2020



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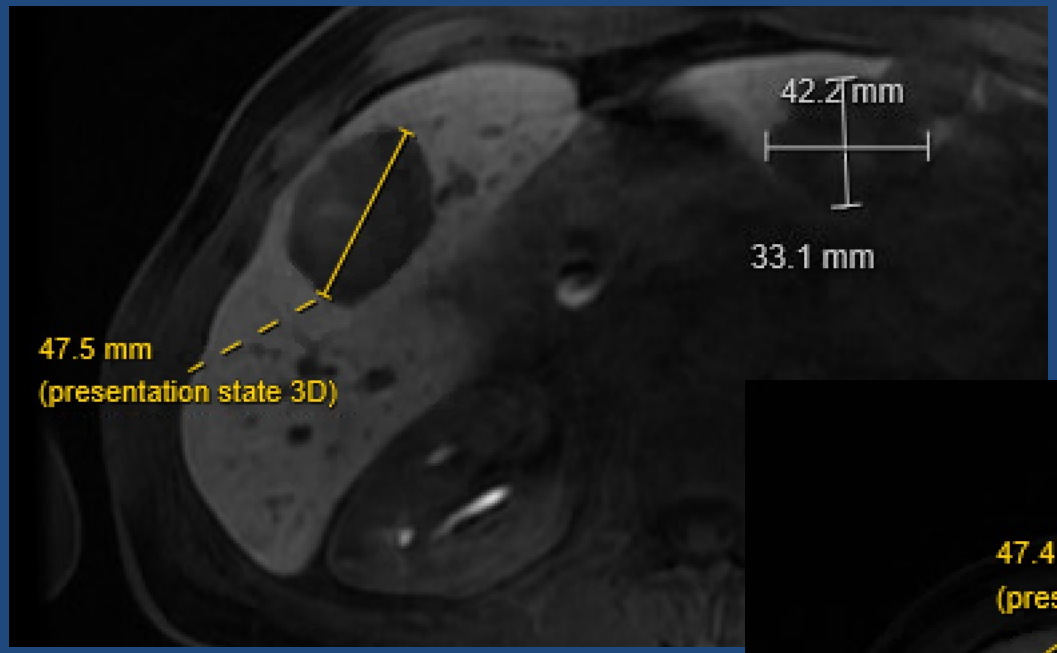
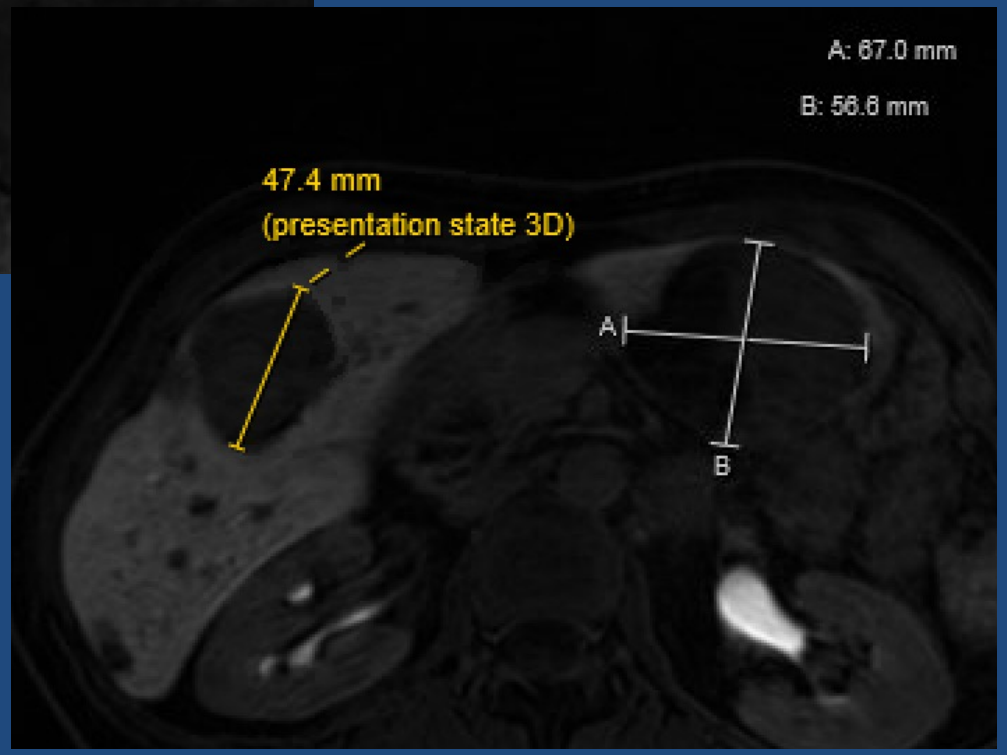
MRI with hepatobiliary contrast

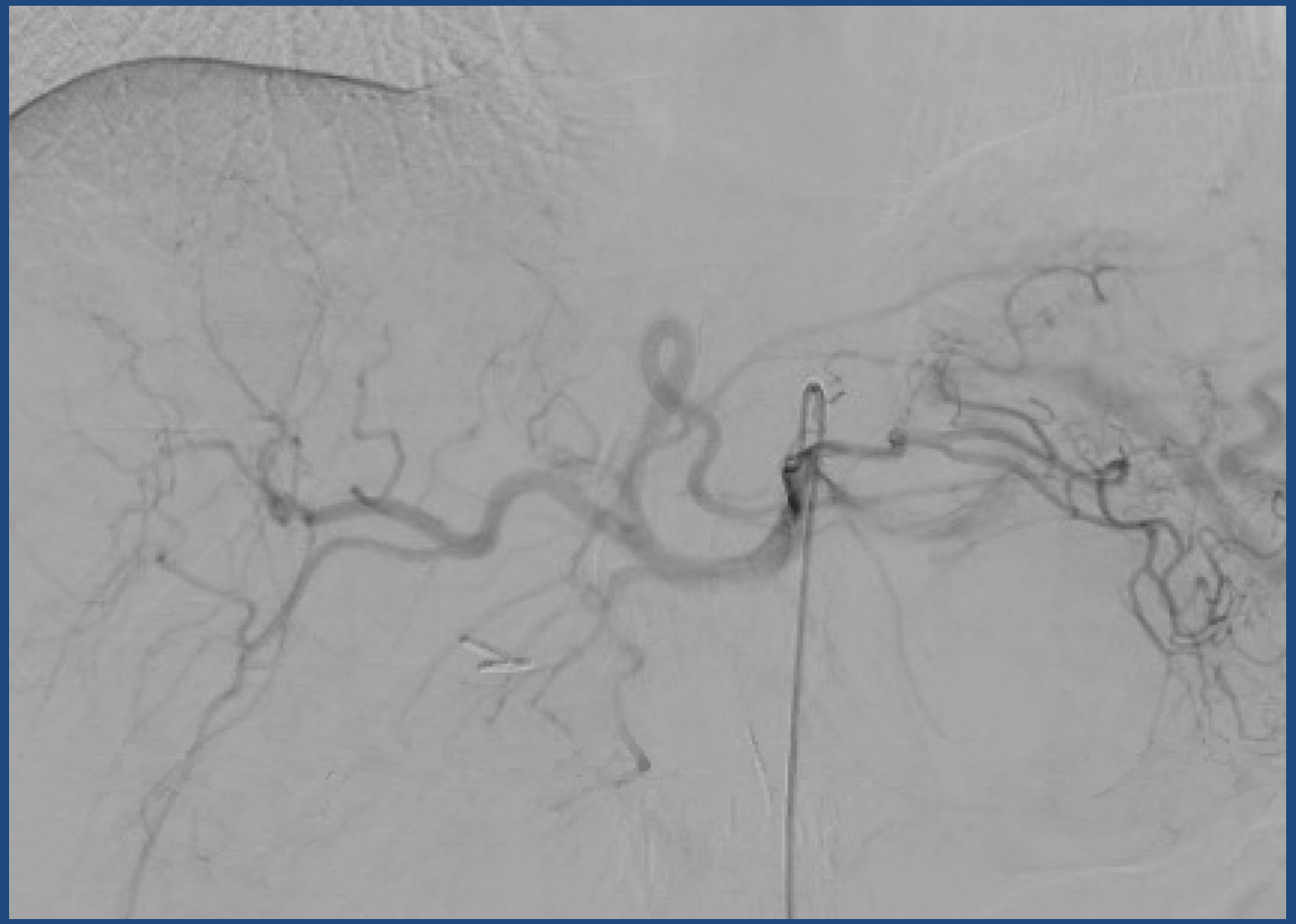


November 2020

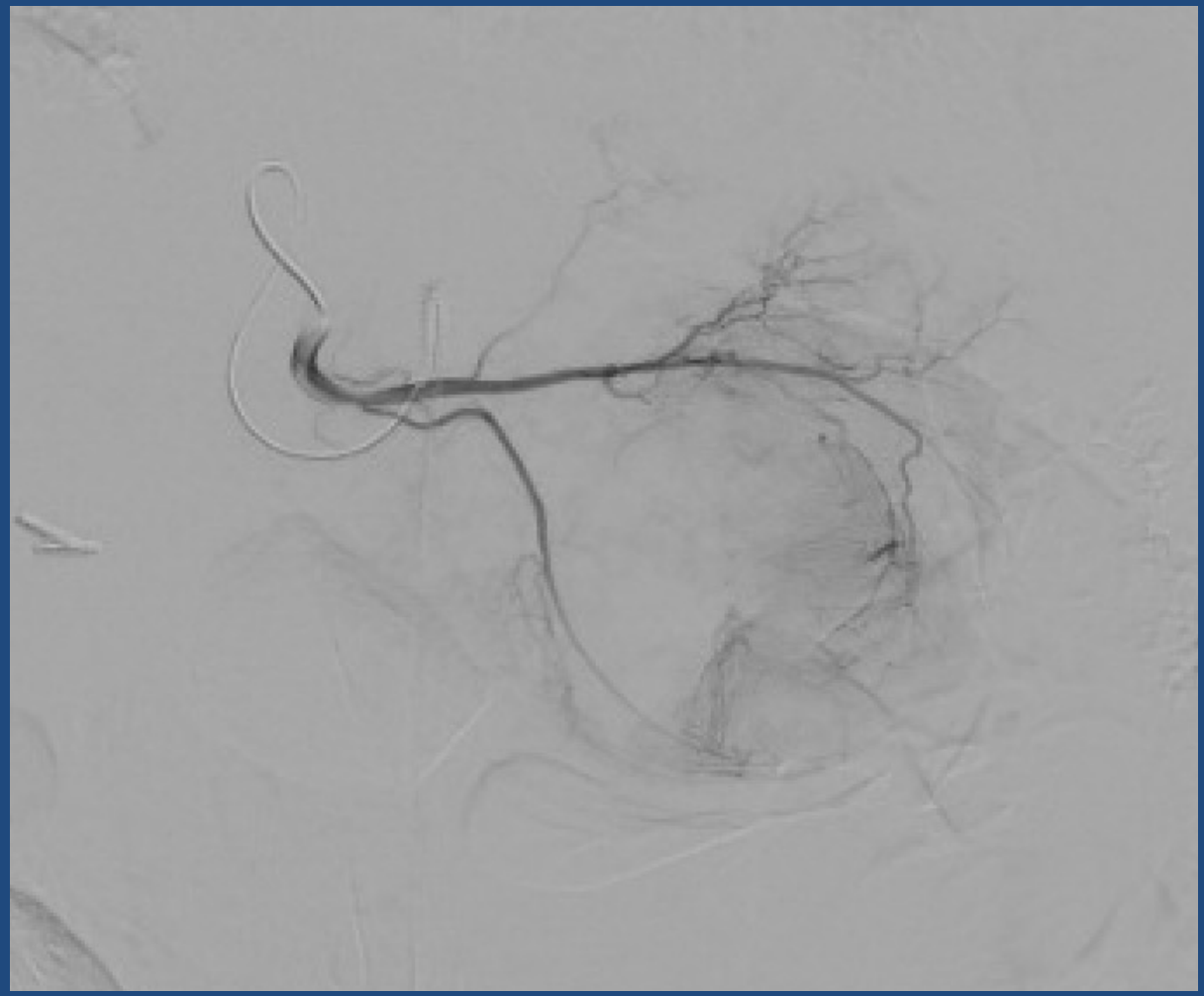
May 2021



Bland Embolization 05/24/2021



Bland Embolization 05/24/2021



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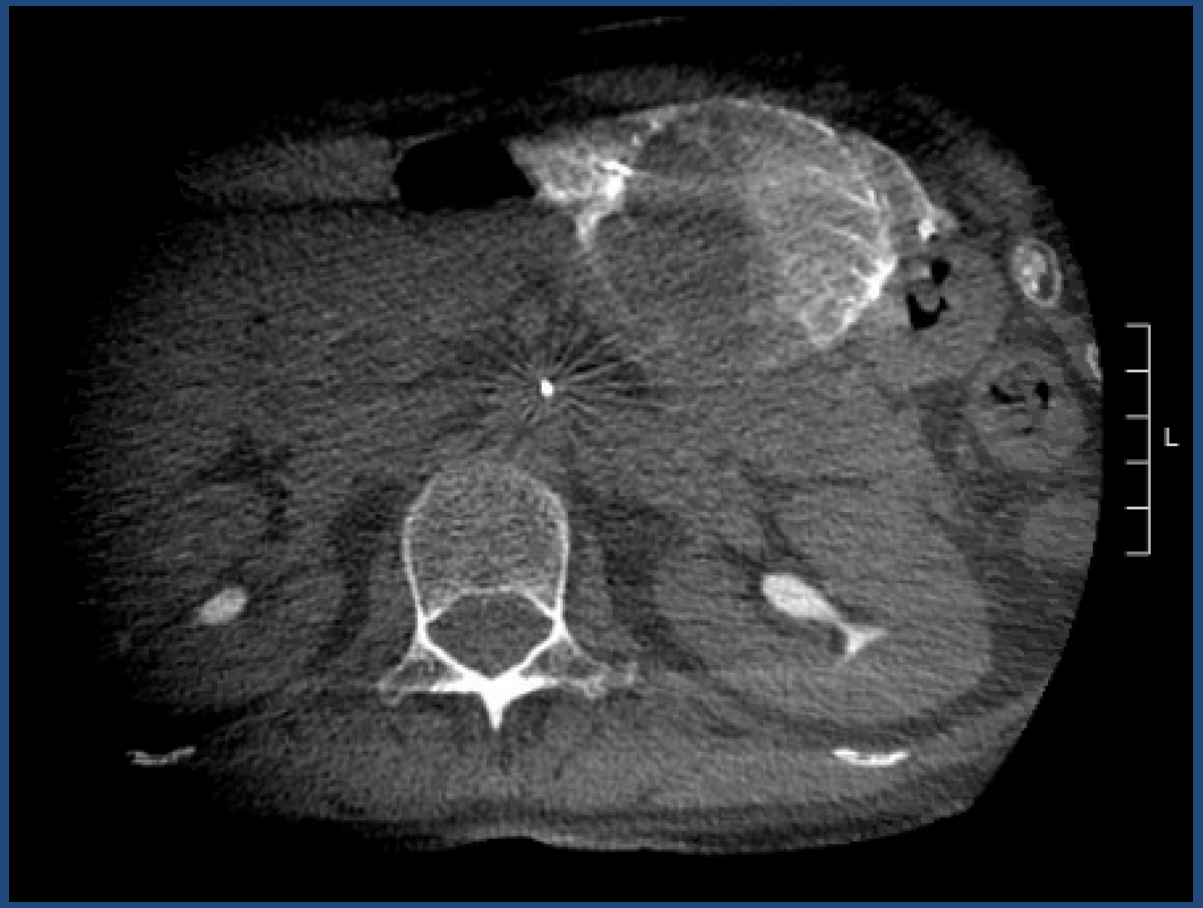
Bland Embolization 05/24/2021



Embolized to stasis with 2 vials of 40-120
1 vial of 300-500 Embospheres

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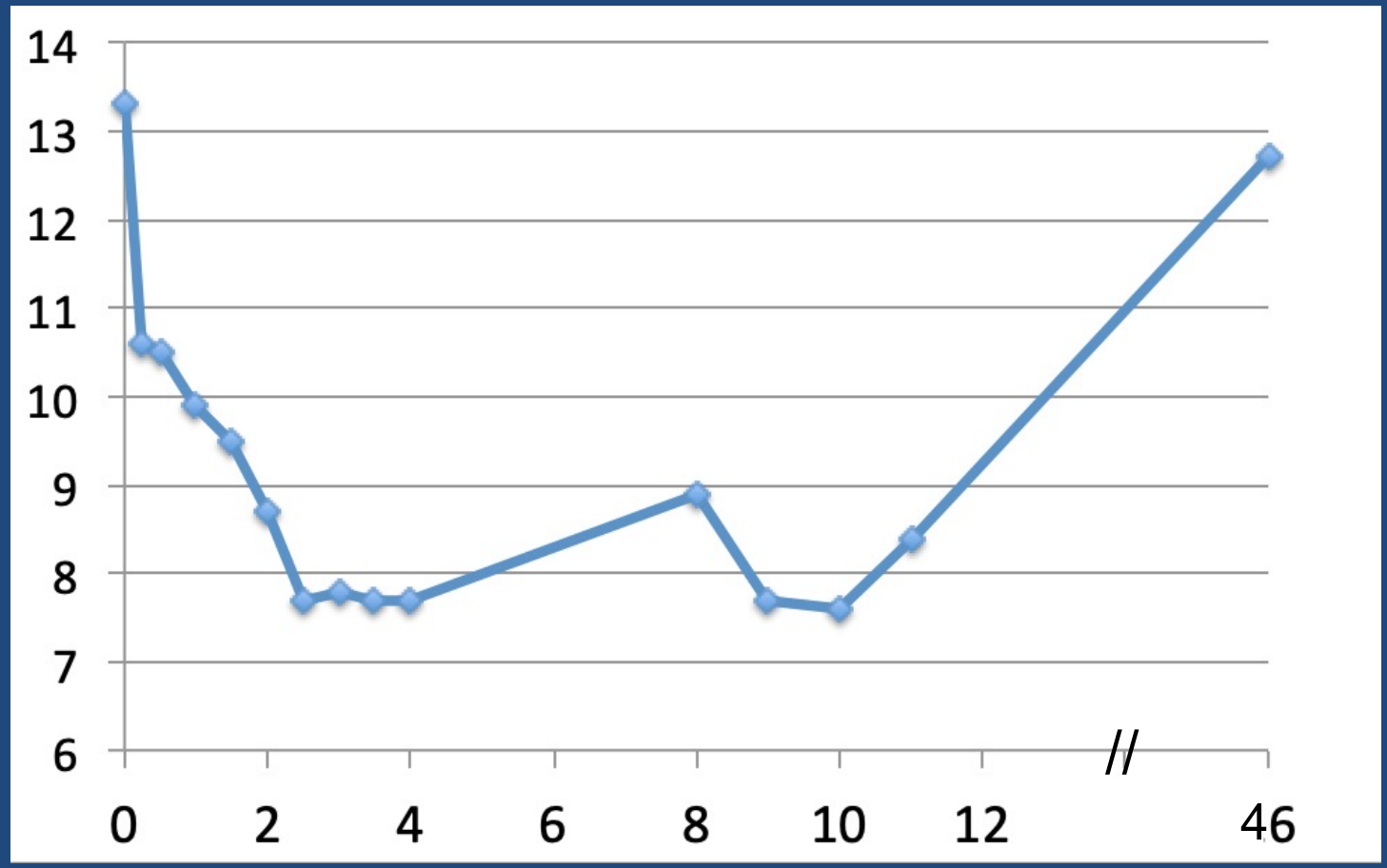
Post-procedure

- Altered mental status
- Severe abdominal pain, nausea
- Transferred to Hospitalist service on PPD2

Hemoglobin Trend



Days

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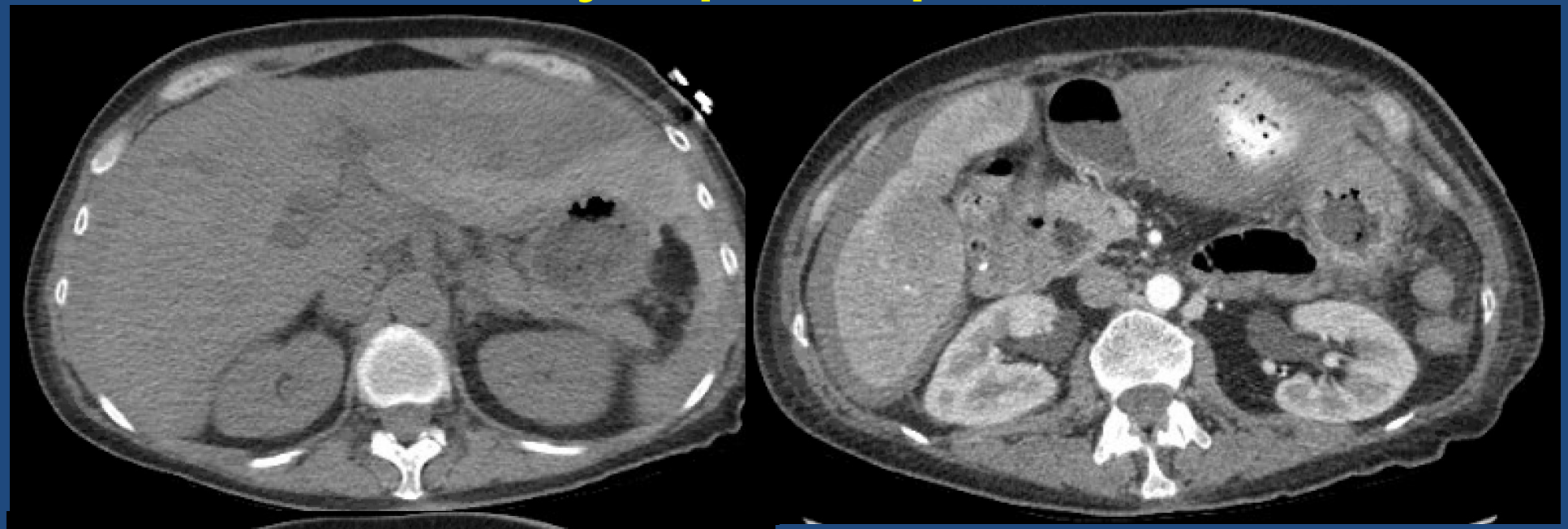
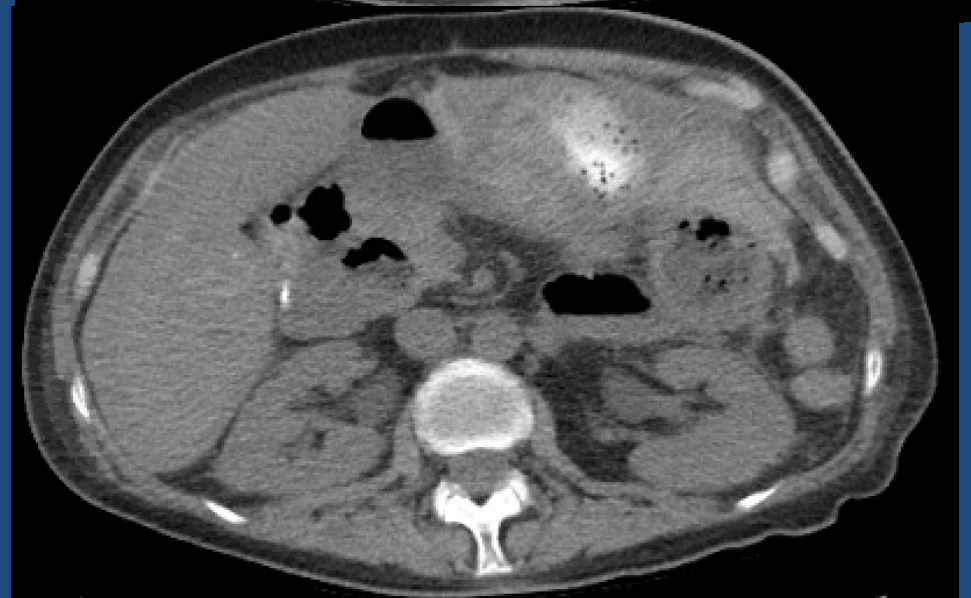
CT 2 days post-procedure





- Intra-peritoneal hemorrhage
- Gas within treated lesion
- No active extravasation

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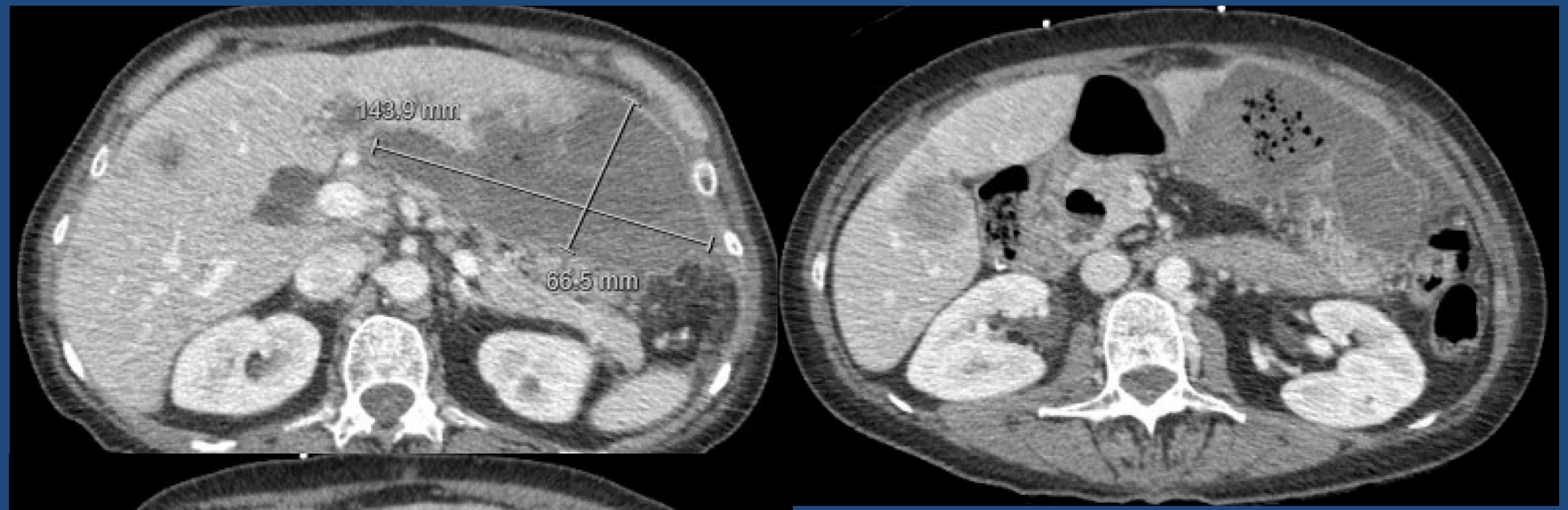
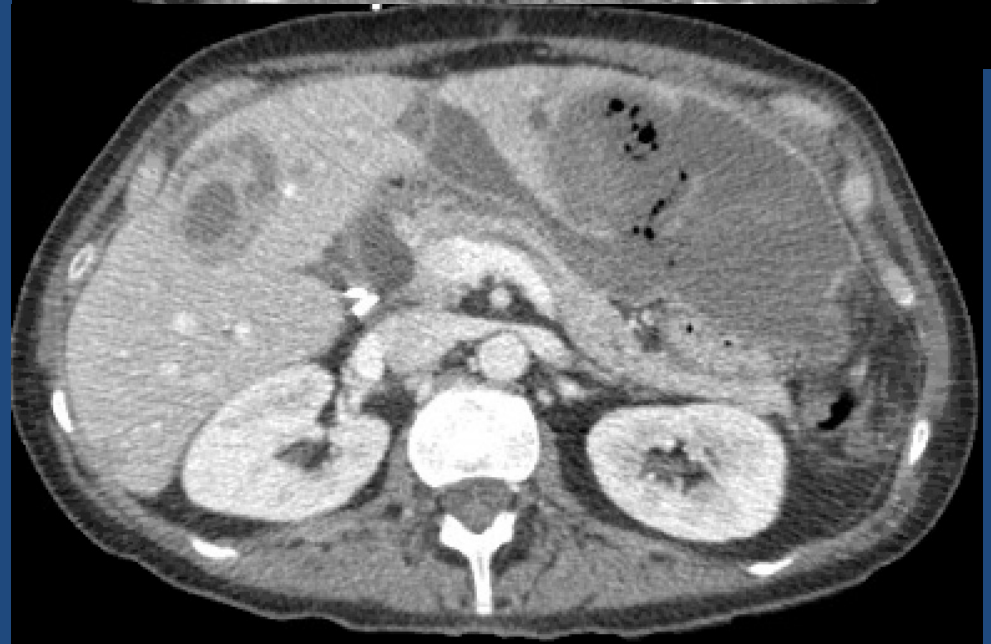
Post-procedure

- Abdominal pain and nausea improved
- Hemoglobin stabilized
- Discharged home on post-procedure day 4
- Back to ER with severe abdominal pain on post-procedure day 7

CT 7 days post-procedure



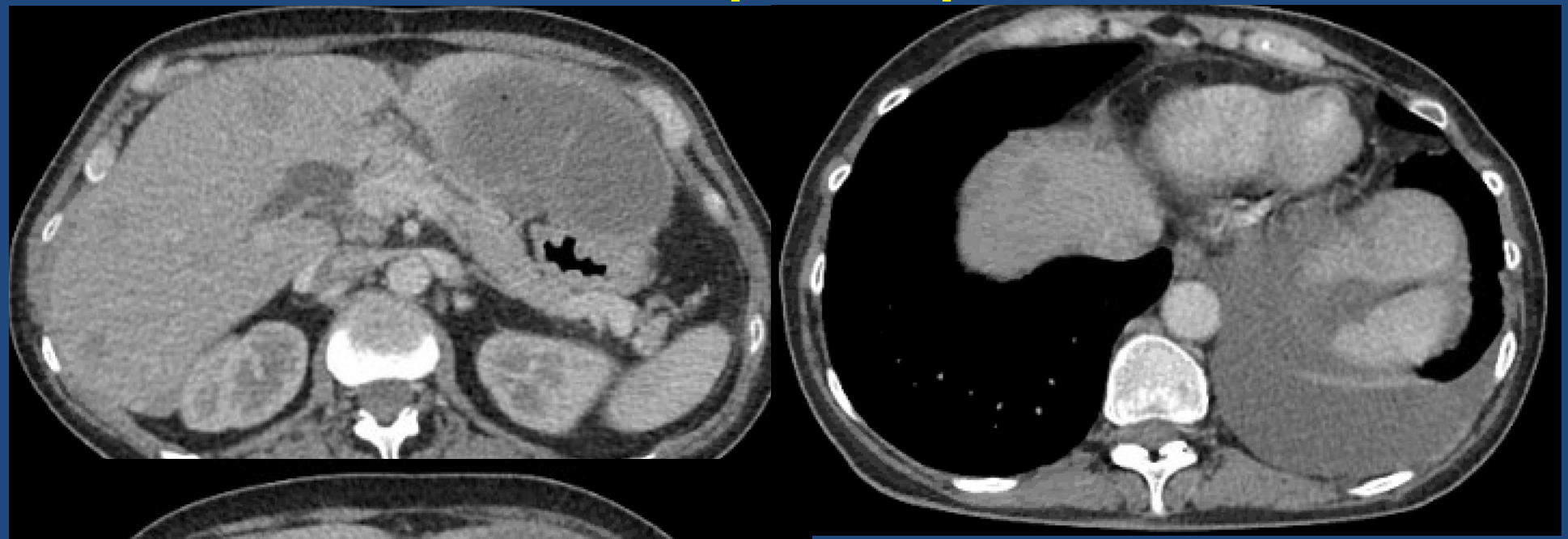


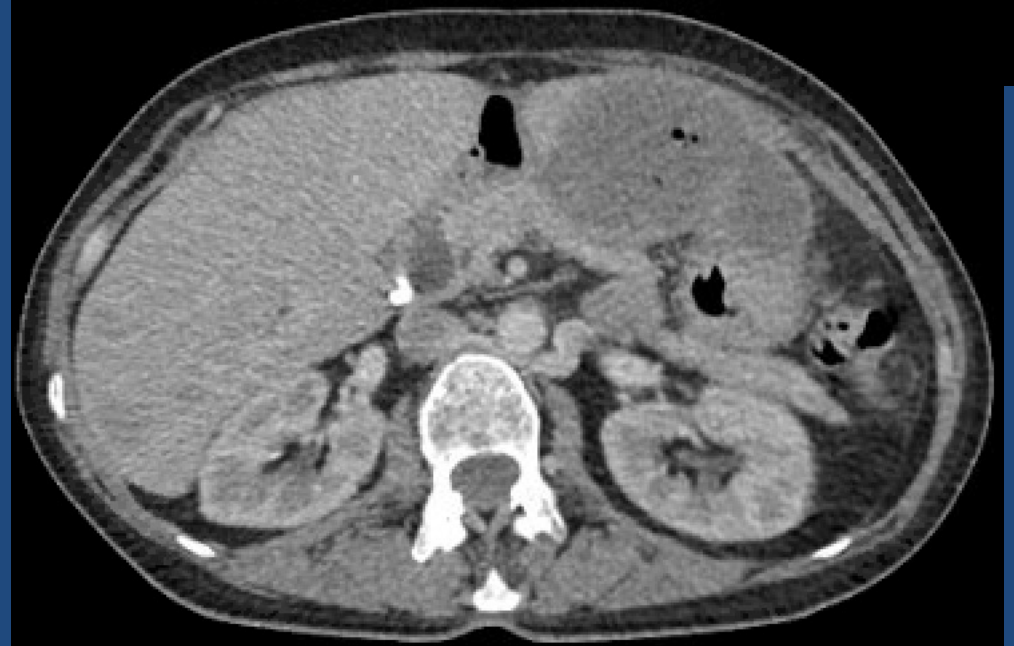
- No extrav
- Loss of border between treated lesion and surrounding hematoma

Post-procedure

- No fever or elevated WBC count
- Treated with steroids, narcotics, APAP
- Discharged to home on PPD 9.
- Presented to OSH 1 mo post-procedure with dyspnea

CT 1 month post-procedure



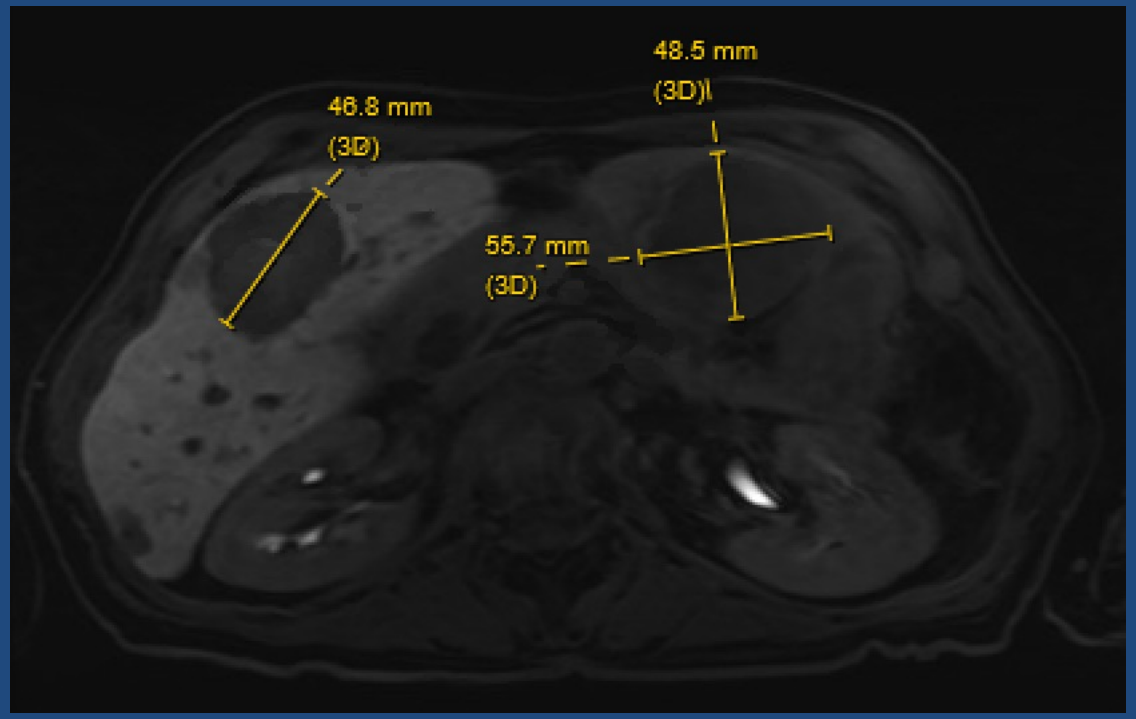


- No acute bleed
- Hematoma smaller
- Less gas
- New large left effusion

6-week Follow-up

- Left thoracentesis on PPD 35
- Dyspnea improved
- Still with some LUQ pain (not on meds)
- Diarrhea improved (2 BM from 5-6 BM per day)

MRI 6 weeks post-procedure



- Segment 3 lesion 6.7 cm to 5.6 cm
- Other lesions stable
- Perihepatic hematoma smaller

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Companion Case

- 74M with WHO grade 1 small bowel NET metastatic to liver.
- Multiple liver metastases stable for years
- One mostly necrotic liver metastasis showed persistent enlargement over 1 year.

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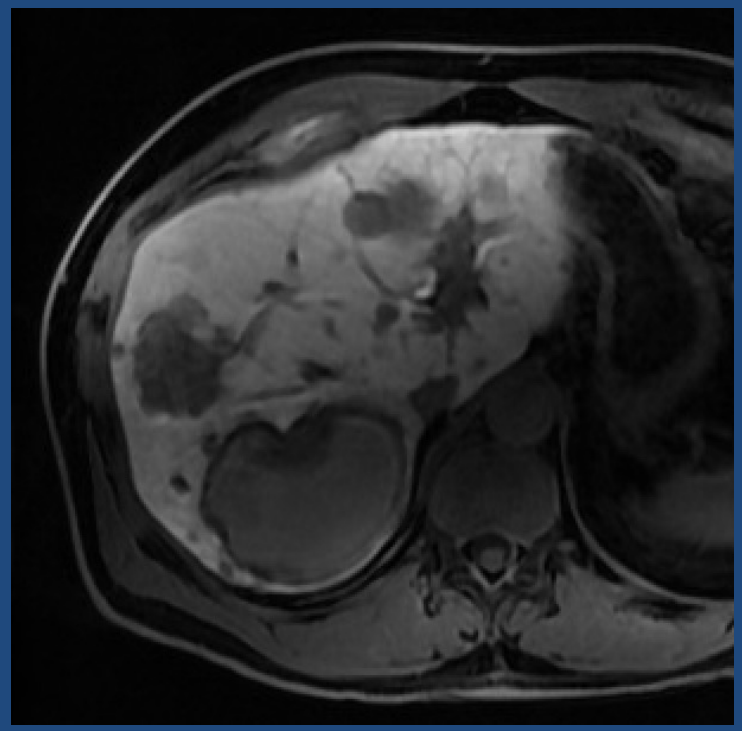

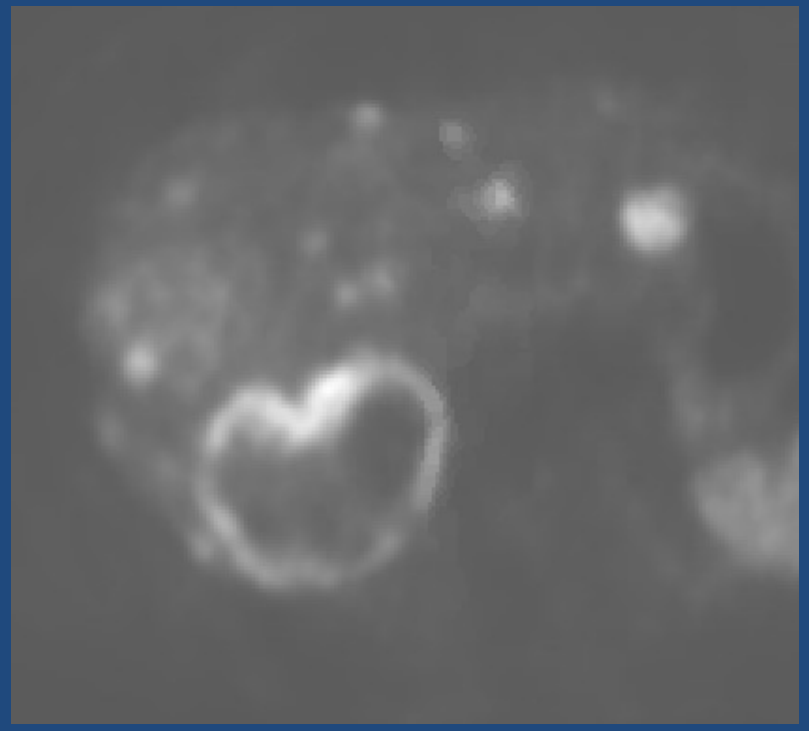

Cu-64 DOTATATE PET/MRI with Eovist

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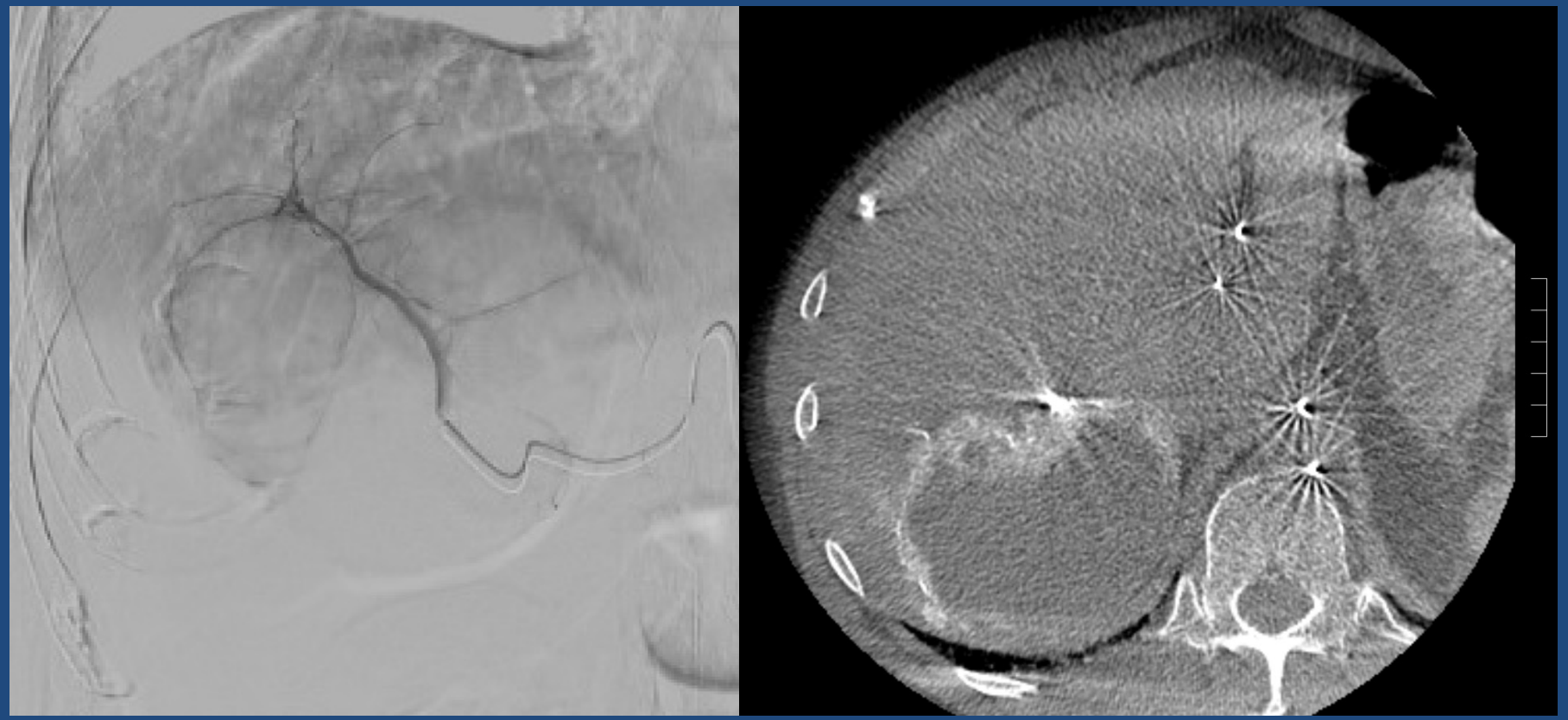
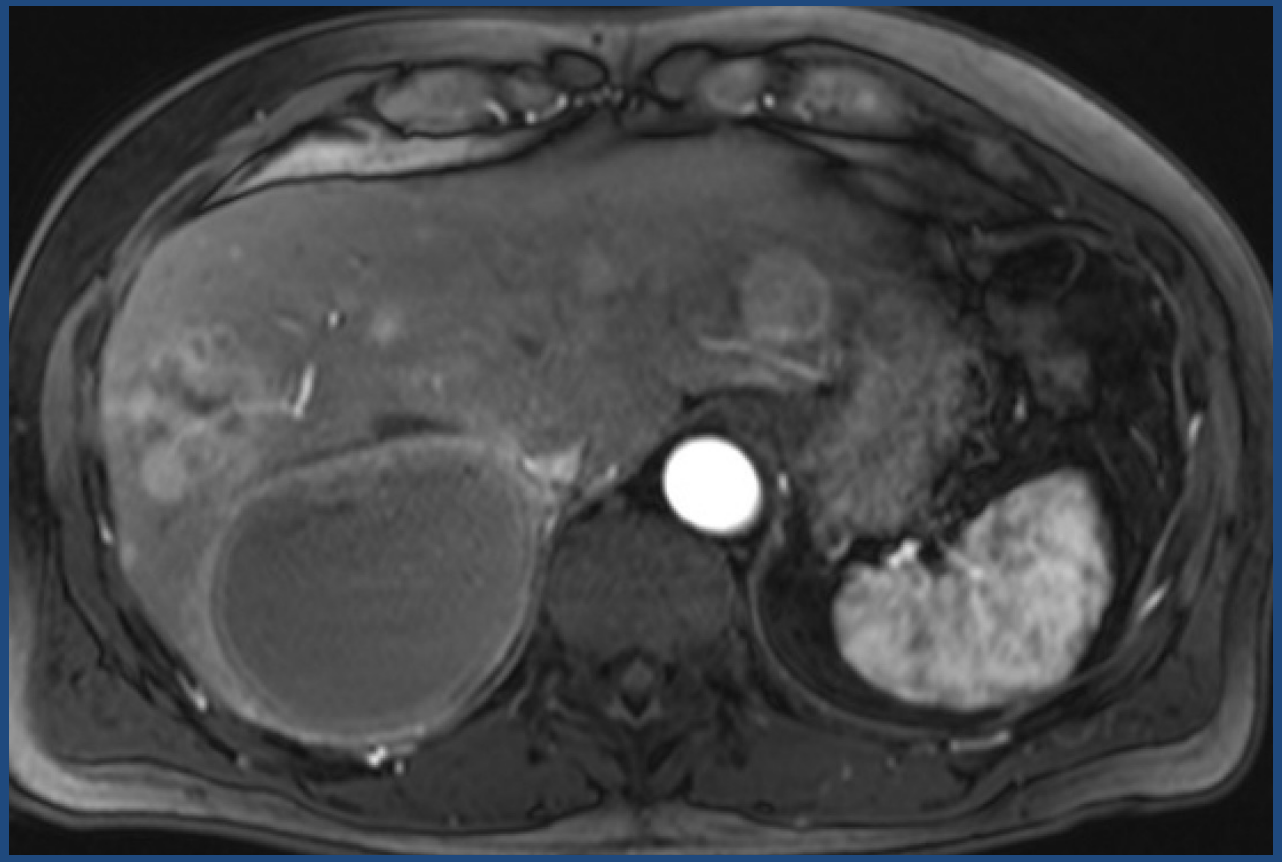


DSA and cone-beam CT

Companion Case



2-month follow-up

T1 post-gadolinium

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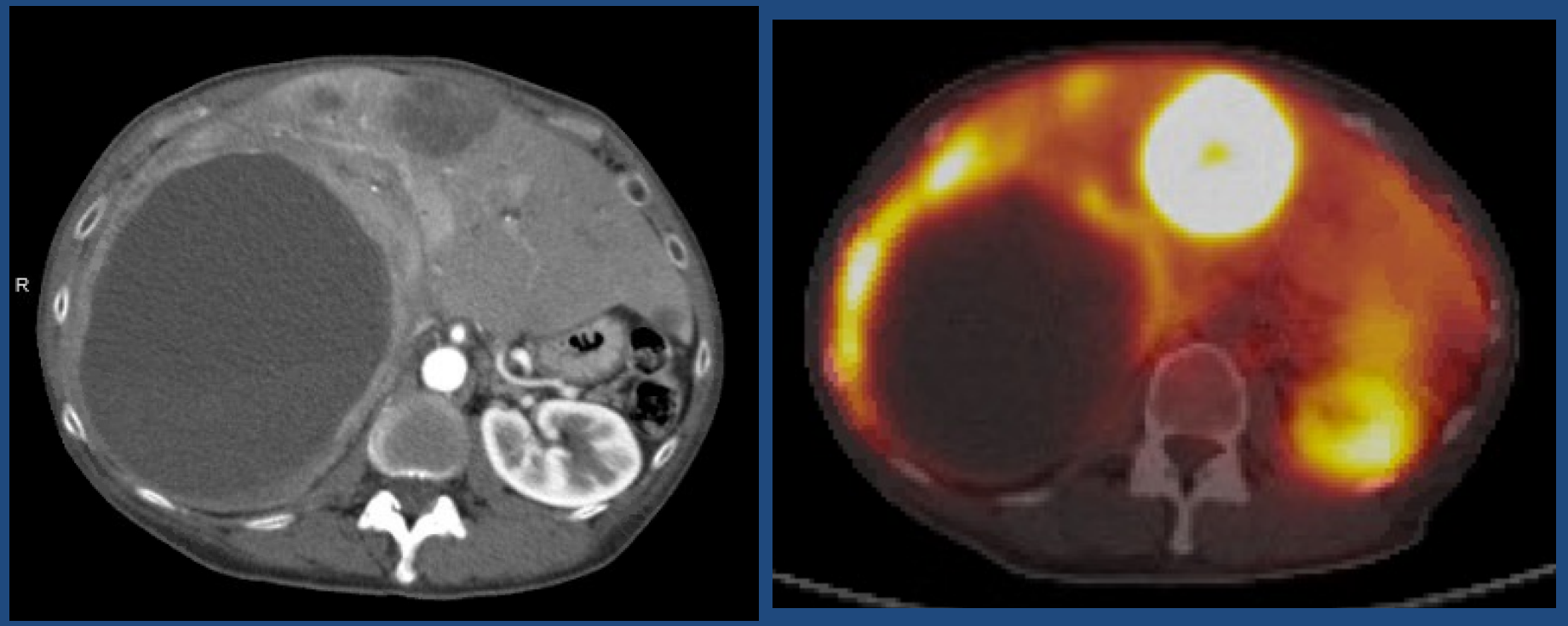
Companion Case

- 60F with WHO grade 1 small bowel NET metastatic to liver.
- Enlargement largely necrotic liver lesion and associated severe abdominal pain (on 3 narcotics)
- All other liver lesions stable.

Companion Case



Ga-68 DOTATATE PET/CT

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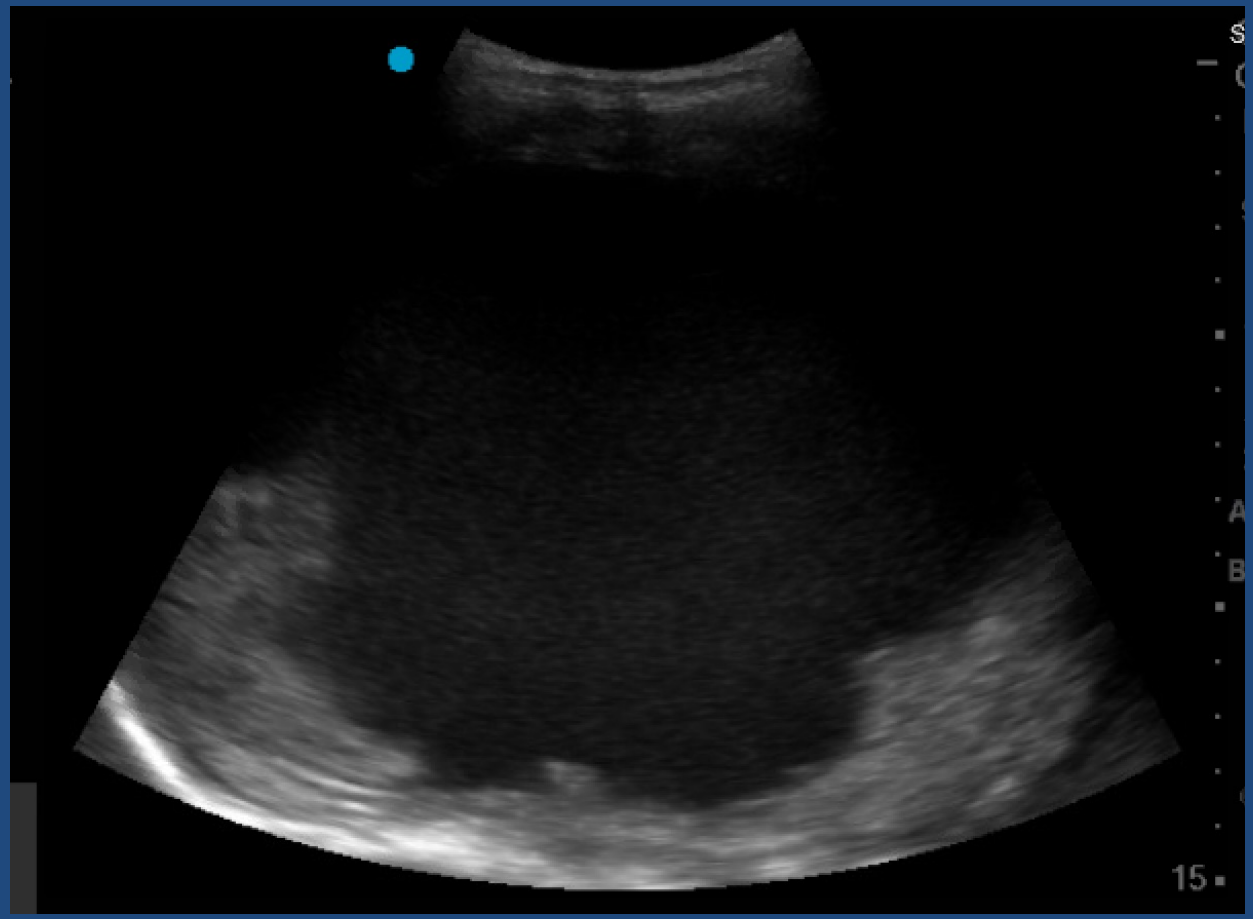

US prior to percutaneous aspiration

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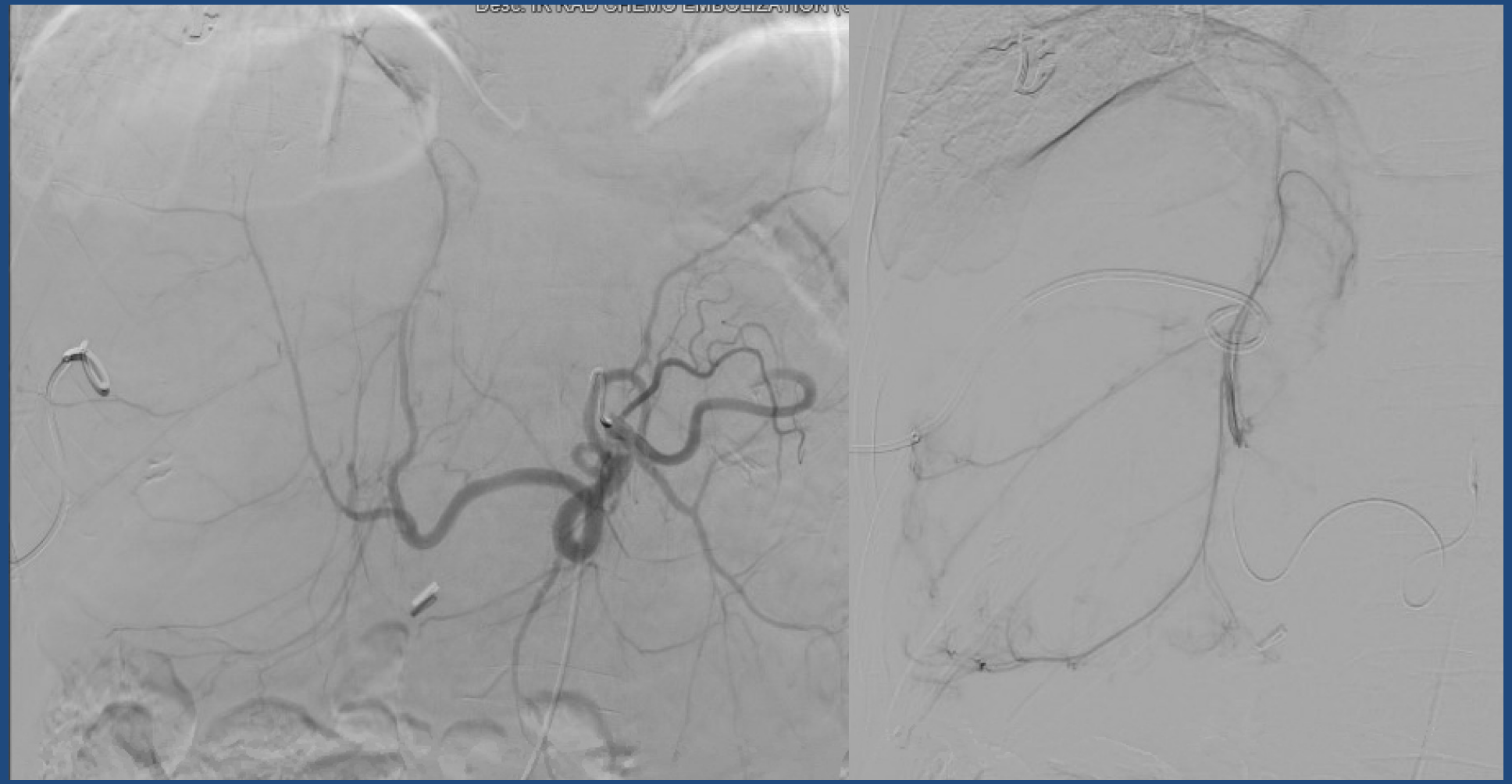
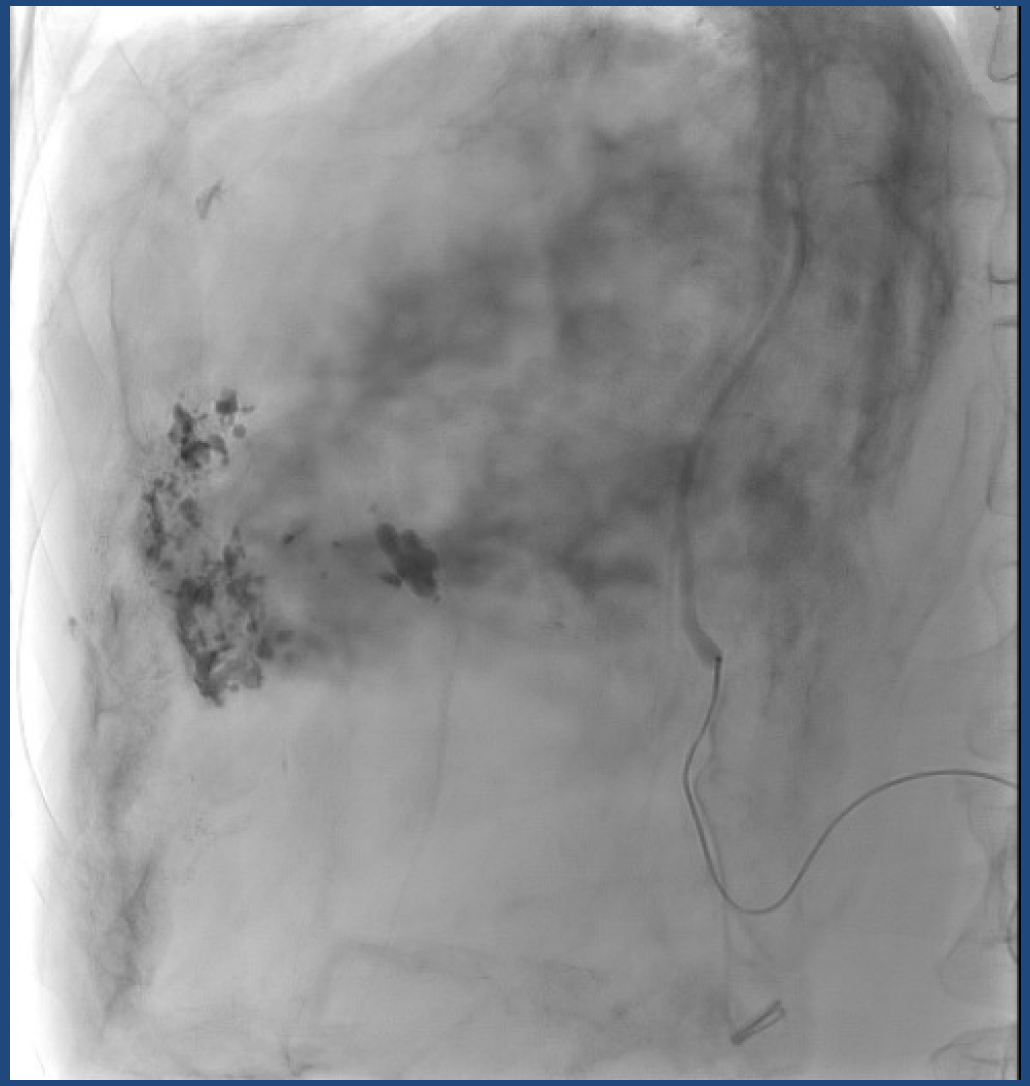


Drain up-sized to 8-Fr

Companion Case



Large amount of contrast accumulates within the necrotic center of the lesion

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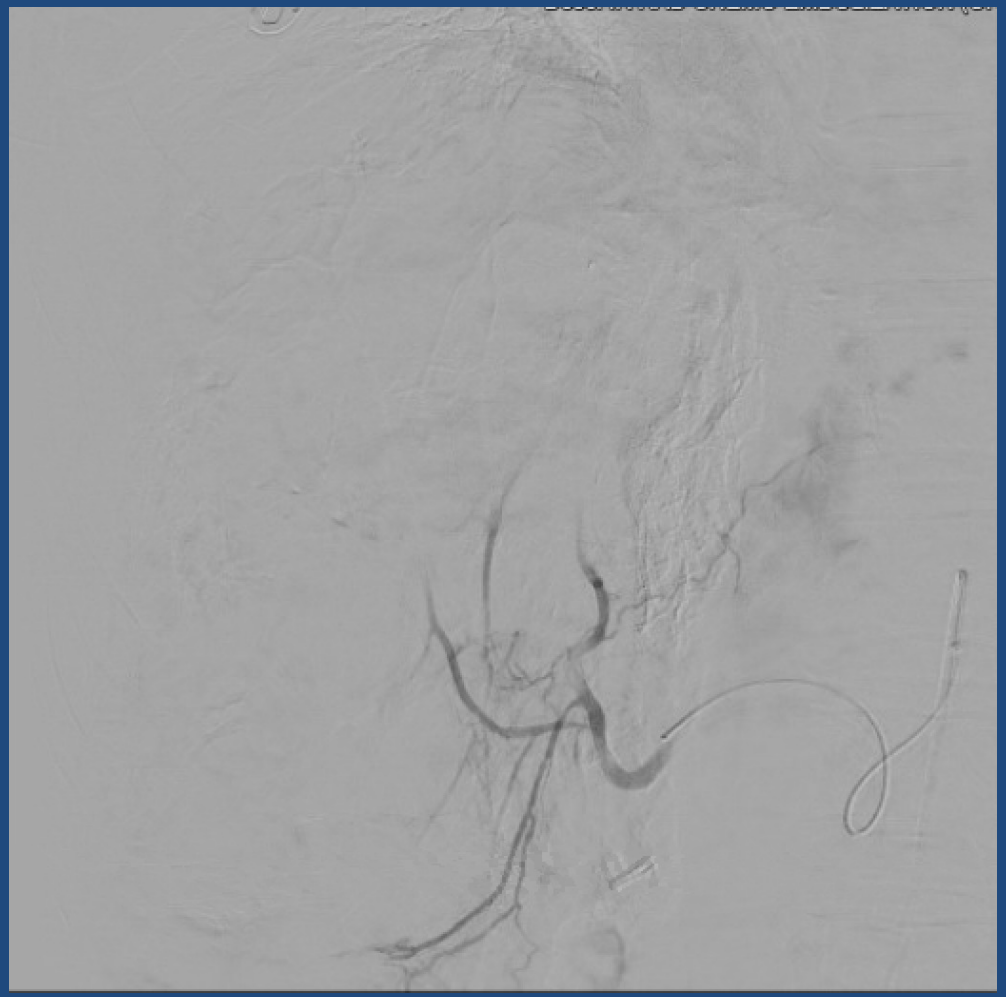

Flow stasis achieved

Materials used:

- cTACE (doxorubicin, mitomycin C, 10 ml ethiodized oil)

- Embospheres
- 40-120 μm 2 vials
- 100-300 μm 2 vials
- 500-700 μm 2 vials
- Gelfoam slurry

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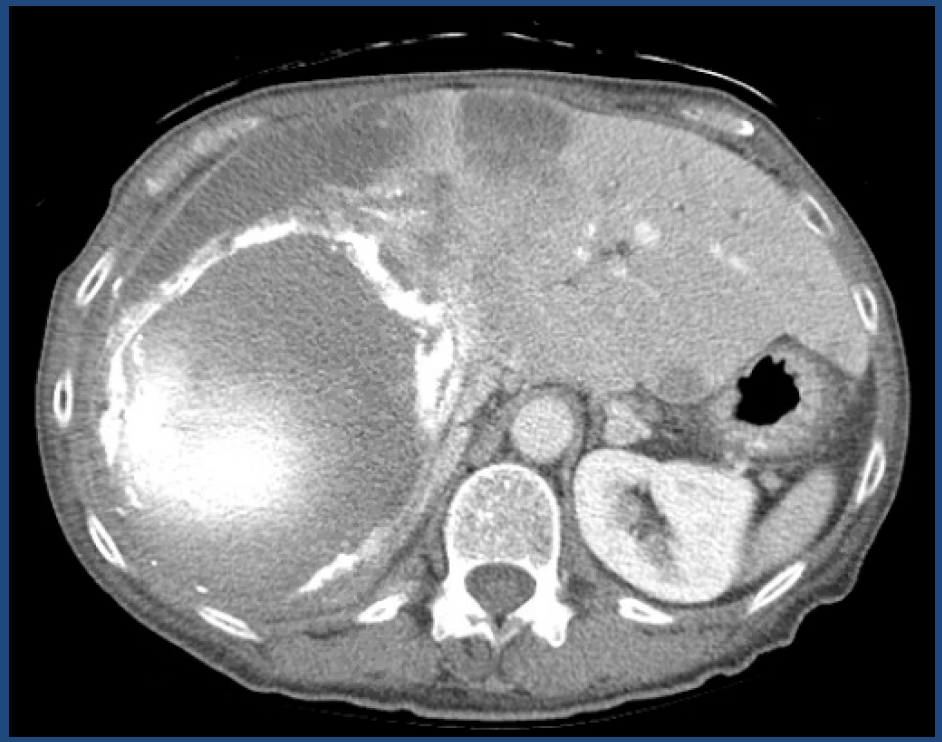

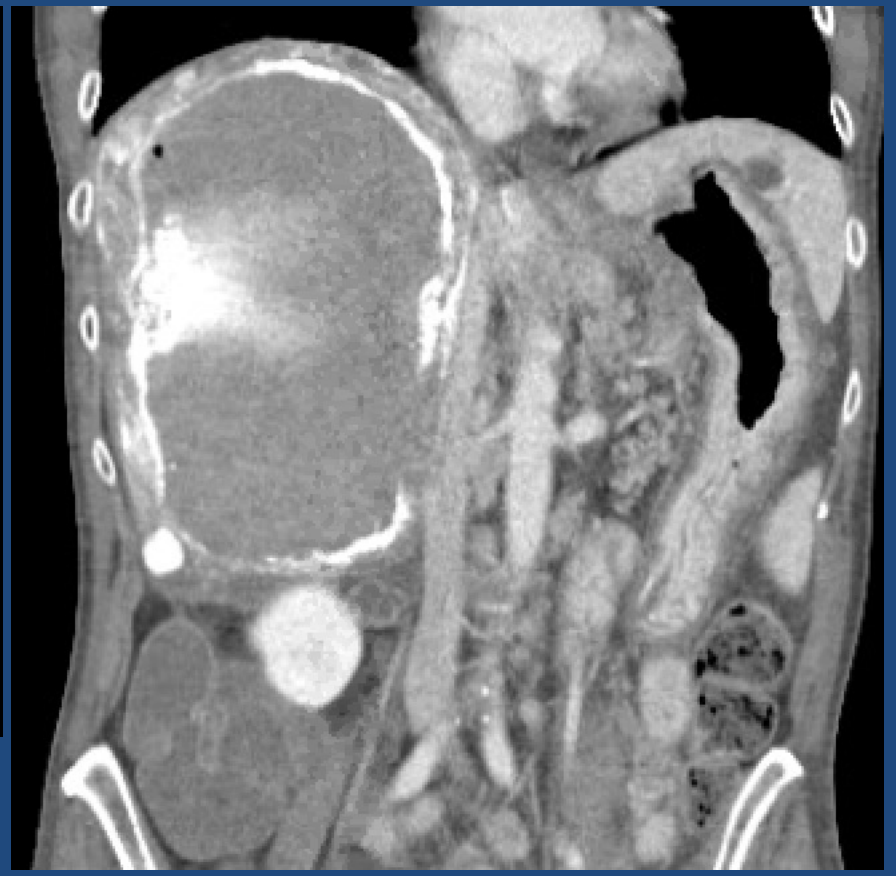

Severe abdominal pain PPD #2

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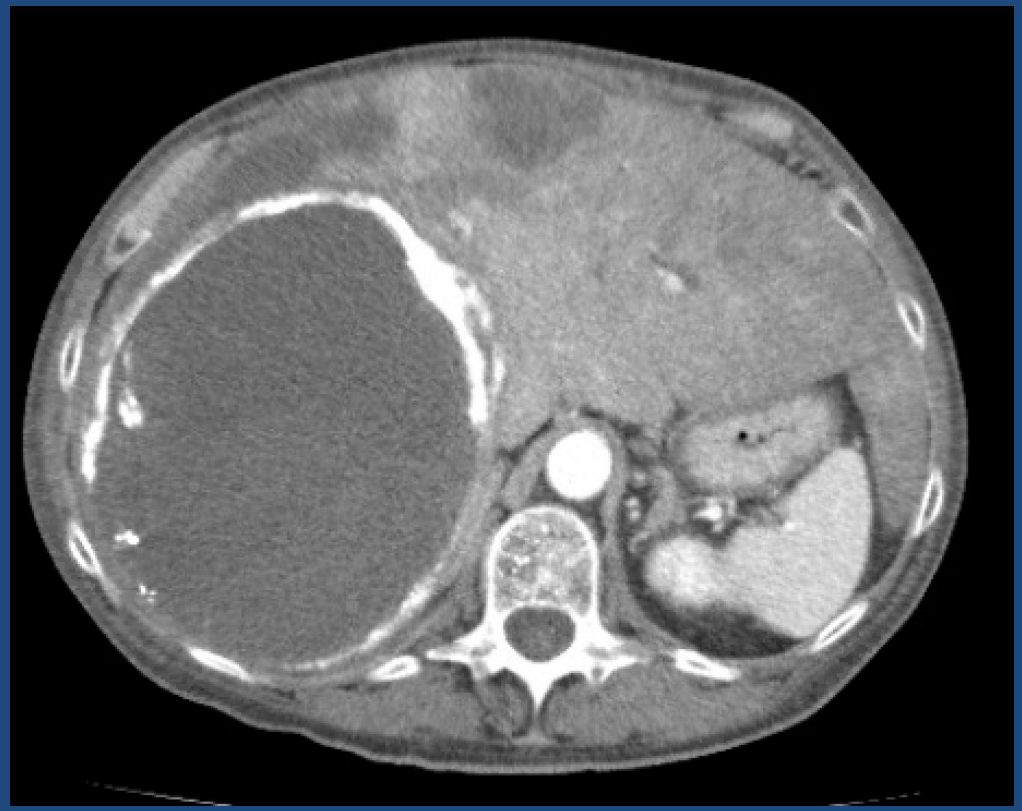

6 weeks after cTACE
Minimal abdominal pain, off narcotics

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Discussion

- Enlargement of necrotic WD-NET metastases likely related to repeated episodes of intra-lesion hemorrhage
- Embolization (or TACE) generally effective for local tumor control
- Embolic material and contrast accumulation within the necrotic portion of the lesion may lead to rapid expansion and rupture, leading to hemorrhage

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Thank You

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