

# Partial splenic artery embolization with NBCA-lipiodol\_ethanol (NLE)

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CC: Progression of anemia

Past Hx: C-LC, DM

•The patient had been under observation for type C cirrhosis at another hospital, but was referred to our hospital due to progressive anemia, lower leg edema, and abdominal distension.



LD

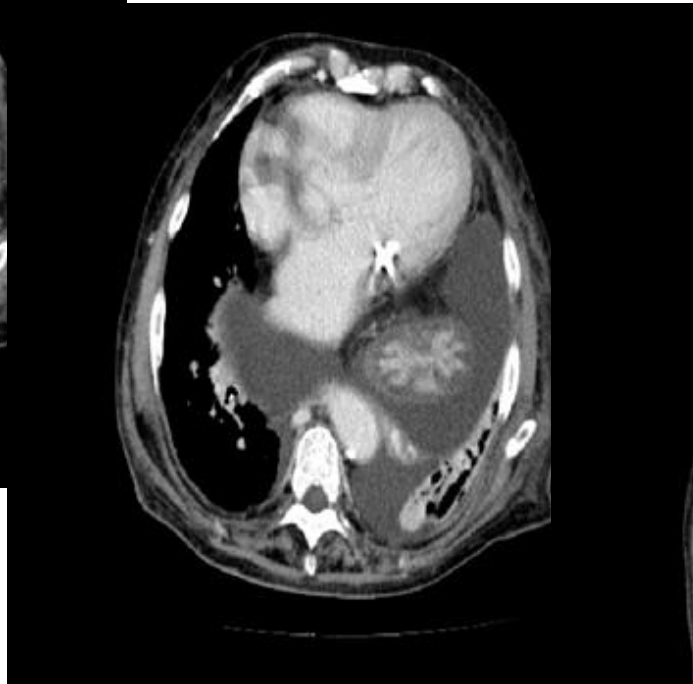
- Alb 2.5g/dl,
- T-bil 1.0mg/dl,
- NH<sub>3</sub> 76μg/dl ,
- eGFR 89.9,
- Hb 6.3g/dl,
- Plt 93000/μl



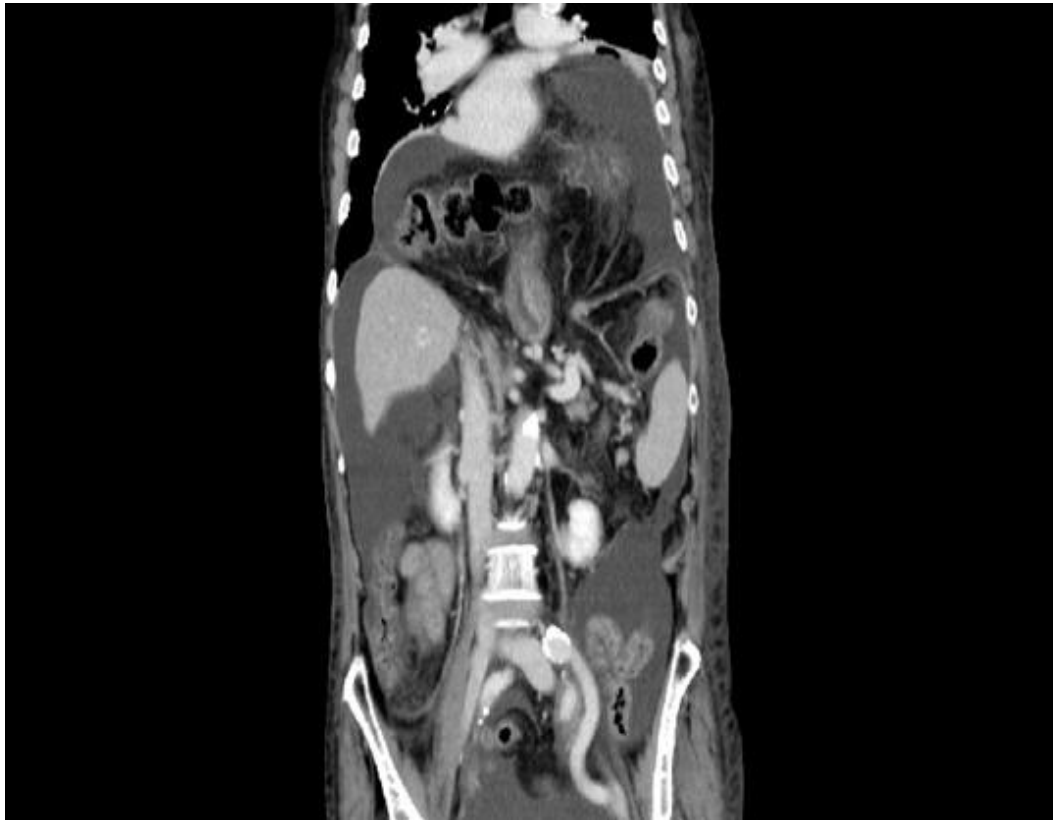
- Endoscopic findings (and intervention):
  - → esophageal varices (LsF2CbRC(-)) → EVL
  - rupture of gastric varices (Lg-c)



# CT findings



Esophageal hiatal hernia is observed.  
Continuous varicose veins in the hilum can also be visualized.



No gastro-renal shunt was observed.

.To perform BRTO is not possible because there is no gastrorenal shunt. So what do we do?





pre-PSE





Post PSE (using NLE) status

# Course of hemoglobin levels

	Before PSE	day1	day13	day20	day24
Hb (g/dl)	6.3	9.1	10.3	10.6	11.3

\* Blood transfusion was only before PSE.



- The bleeding from the gastric varices stopped and the anemia stopped progressing, but she died about a month later due to the progression of hepatic encephalopathy and liver failure.
- After PSE, no bleeding was observed until death.



- PSE is performed for thrombocytopenia and portal hypertension associated with hypersplenism.
- For esophageal varices or gastric varices, it has been reported that the combined use of PSE with EVL or EIS has significantly better results than EVL or EIS alone.
- This may be because PSE has the effect of decreasing portal pressure by reducing splenic blood flow.
- PSE was first performed for ruptured esophageal varices.



- NBCA-lipiodol-ethanol (NLE) is an embolic material that has improved catheter adherence, which is a disadvantage of NBCA.
- There does not seem to be much of a consensus on the ratio.
- In this case, a ratio of 1:1:2 (N:L:E) was used.



# Conclusion

•PSE may be a clinical option for bleeding from esophageal and gastric varices.

