

## Clinical Image

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# Abernethy malformation

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### Description

A 59-years-old woman presented to the emergency department with sudden onset of intermittent hematemesis and melena. The patient had a history of stage IV cervical cancer, sigmoid colostomy (because of rectovaginal fistula). A complete blood count showed normocytic anemia (79 g/l) and other laboratory evaluation showed the elevation of ammonia (38  $\mu\text{mol/l}$ ). The total bilirubin, transaminase and creatinine level were normal. Upper endoscopy revealed hemorrhage of esophageal varices that was stopped by local treatment with the combinations of spraying hemostatic and sclerotherapy (Figure 1). The CT-scan revealed no cirrhosis and liver lesion but did not show the absence of the portal vein with a complete extrahepatic shunt of the portal blood, considered Abernethy Malformation 1b (Figure 2,3), determined to be the possible reason of esophageal varices and megalosplenia. The old patient suffered from first-onset gastrointestinal bleeding and was diagnosed the only curative treatment is liver transplantation. This patient was stopped bleeding and transferred to cancer center for tumor therapy.

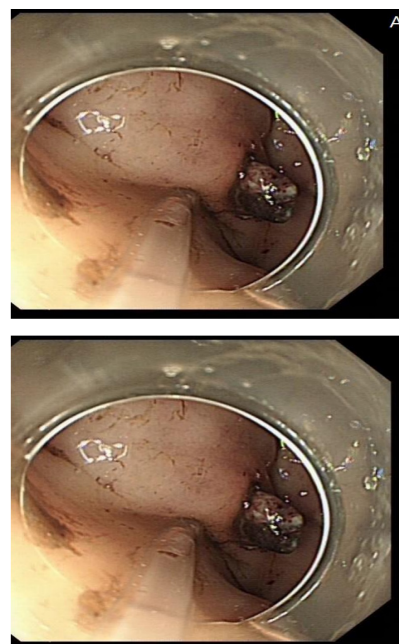
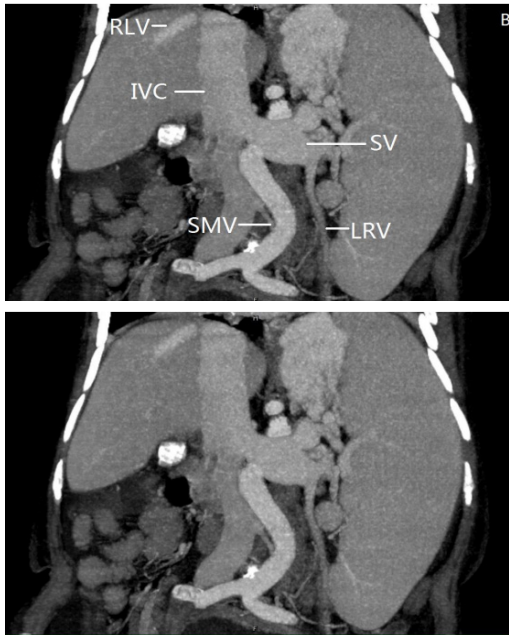
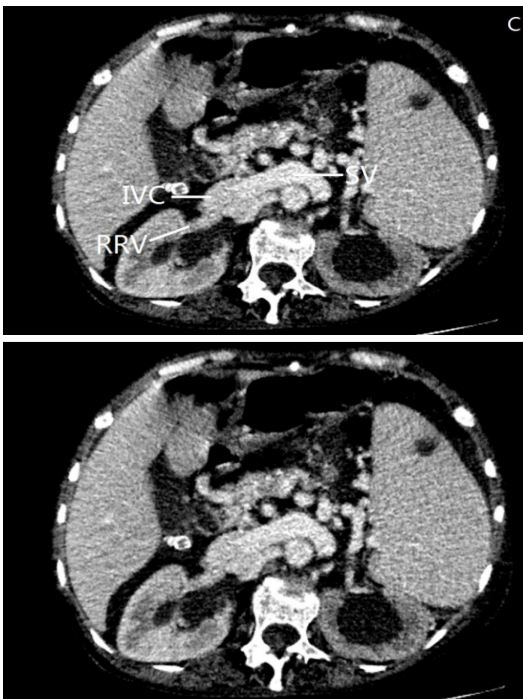


Figure 1: Hemorrhage of esophageal varices by upper endoscopy.



**Figure 2:** Computed tomography scan: Absence of the portal vein (coronal position).



**Figure 3:** Computed tomography scan: Absence of the portal vein (cross-sectional position).

### Discussion

Congenital extrahepatic portosystemic shunts have been reported as rare events in the past. Nowadays, due to the evolution of imaging techniques, the reported number of CEPS has increased [1,2]. CEPS can be divided into three types according to symptom and the congenital anomalies associated. The liver was not perfused with portal blood and the superior mesenteric vein and splenic vein did not join to form confluence (Abernethy Malformation type Ib). Abernethy Malformation Ib which was frequently found at younger ages associated with the symptoms of portosystemic encephalopathy or portal hypertension and other congenital anomalies [3]. Clinically, we still cannot ignore the congenital malformations of elderly patients.

### References

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