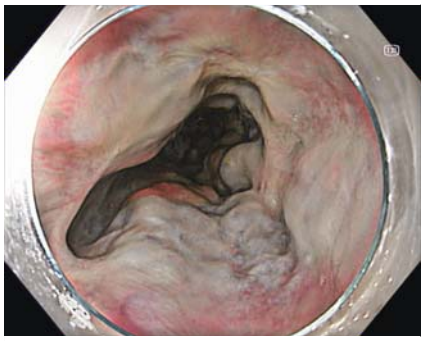
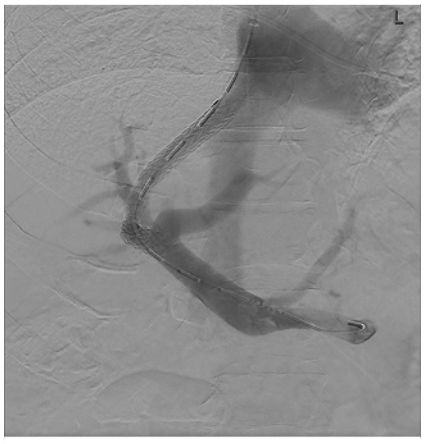
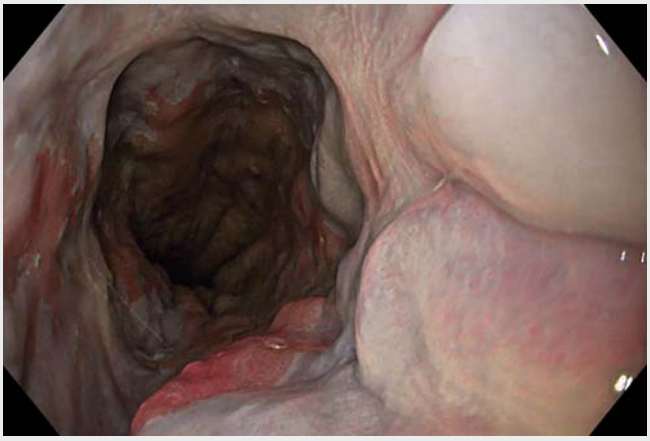
Esophageal adenocarcinoma on esophageal varices – endoscopic resection after transjugular intrahepatic portosystemic shunt



▶ **Fig. 1** Esophageal adenocarcinoma on esophageal varices and scars after variceal band ligation.



▶ **Fig. 2** Implantation of transjugular intrahepatic portosystemic shunt.



Video 1 Esophageal adenocarcinoma on esophageal varices and scars after variceal band ligation. Prior to endoscopic submucosal dissection, transjugular intrahepatic portosystemic shunt implantation was performed to reduce the intravariceal pressure and the bleeding risk.

Endoscopic resection is the first-choice therapy for T1a esophageal adenocarcinoma (EAC) [1]. In patients with liver cirrhosis, endoscopic resection might be difficult due to portal hypertension, esophageal varices, and coagulation disorders. Few case reports describe endoscopic resection in this setting and the optimal treatment strategy is not defined [2–5].

We report on a 56-year-old man who was referred for endoscopic resection of EAC arising within Barrett's esophagus. Alcoholic liver cirrhosis had been diagnosed 6 months earlier after severe bleeding from esophageal varices. The bleeding was stopped with variceal band ligation and the patient stopped drinking. During a scheduled follow-up endoscopy 3 months later, variceal band ligation was repeated and Barrett's esophagus was diagnosed. Biopsies from a slightly elevated lesion revealed low-grade dysplasia.

In our hospital the patient presented in good clinical condition with compensated liver cirrhosis (Child-Pugh class A, bilirubin 2.5 mg/dl, platelet count 49/nl, INR 1.2, absence of ascites and encephalopathy). Esophagogastroduodenoscopy (EGD) showed Barrett's esophagus C1M3 with two neoplastic areas and persistence of esophageal varices beneath multiple scars after variceal band ligation (▶ **Fig. 1**, ▶ **Video 1**). The bleeding risk of endoscopic resection seemed inacceptable. Transjugular intrahepatic portosystemic shunt (TIPS) placement was performed including radiologic embolization of the left gastric vein (▶ **Fig. 2**, ▶ **Fig. 3**). The hepatic venous pressure gradient was reduced from 19 mm Hg to 9 mm Hg.

Transabdominal ultrasound 6 weeks later confirmed patency of the TIPS. Endoscopy showed regredience of the esophageal varices and end endoscopic submucosal dissection (ESD) was performed under general anesthesia (▶ **Video 1**). Repeated bleeding during ESD was controlled endoscopically and terlipressin was administered for 24 hours. After an uneventful course, the patient was discharged 72 hours after ESD. Histology showed curative resection of two mucosal EACs (▶ **Fig. 4**).

TIPS implantation followed by endoscopic resection is a promising strategy in the treatment of early esophageal neoplasia in patients with esophageal varices.

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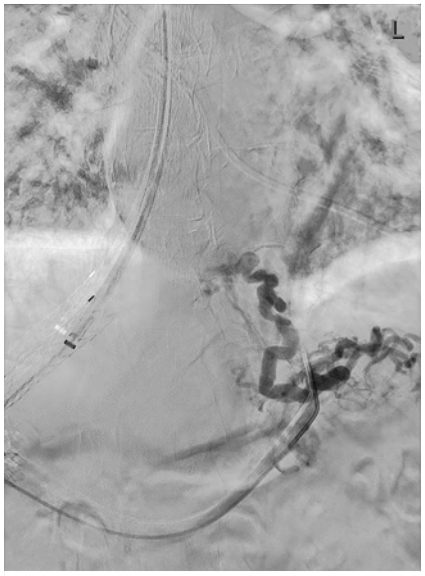
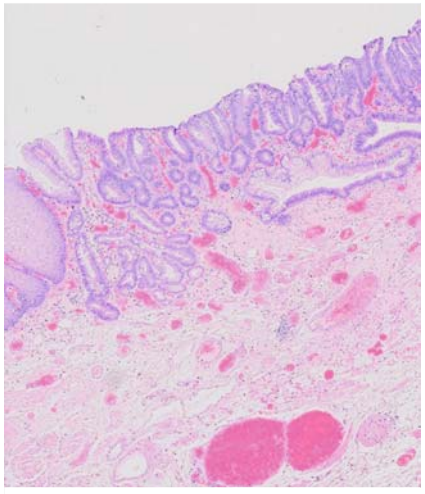


▶ **Fig. 3** Embolization of the left gastric vein.



▶ **Fig. 4** Histopathology of the endoscopic submucosal dissection resection specimen showing well-differentiated intramucosal esophageal adenocarcinoma and multiple dilated vessels in the submucosal layer.

Competing interests

The authors declare that they have no conflict of interest.

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Bibliography

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