

Acute variceal bleeding in patients with primary myelofibrosis successfully treated with endoscopic histoacryl injection

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Cite this article as: Ma J, Li P, Jiang Y, Hu J, Wei H. Acute variceal bleeding in patients with primary myelofibrosis successfully treated with endoscopic histoacryl injection. *Turk J Gastroenterol* DOI: 10.5152/tjg.2018.18324.

Dear Editor,

Primary myelofibrosis (PMF) is a myeloproliferative neoplasm. Complications include symptomatic portal hypertension (PH) that may lead to variceal bleeding or ascites. Splenectomy and transjugular intrahepatic portosystemic shunt are generally used to alleviate the symptoms of PH (1). The treatment for bleeding from gastric varices (GV) due to PH in patients with PMF is lacking. In this hospital, 4 patients with life-threatening bleeding from GV due to extramedullary hematopoiesis associated PH were successfully treated using endoscopic histoacryl injection.

The procedure was an elective treatment for bleeding from active GV and secondary prevention of bleeding. All patients first received endoscopy, and/or endotherapy 12-24 hours after being admitted to hospital. For endotherapy, the "sandwich" method was performed as previously described by Ni et al. (2). A second round of injections was performed a week after the initial hemostasis, if necessary, until entire GV solidified. The injected GV were palpated using the hub of the injector (with a retracted needle) to determine the solidification and obliteration of GV.

Immediate hemostasis was successfully achieved in all 4 patients with active bleeding from GV after the first injection. No severe complications were observed in all 4 patients. The patients were routinely treated with a combination of vasoactive drugs, proton pump inhibitors, and prophylactic antibiotics (cefmetazole, 3-5 days). During the mean follow-up period of 6 months (4-9 months), none of the patients experienced variceal rebleeding. Further, 3 of the patients showed a decrease in the size of GV, and 1 patient died of sepsis 6 months after endotherapy.

Primary myelofibrosis may progress to severe PH, ascites, esophageal varices, and GV because of the massive increase in splenoportal blood flow and decreased hepatic vascular compliance or hepatic venous thrombosis (3,4). PH usually occurs as a complication in 10%-17% of patients (1). Clinical presentation is similar to PH because etiologies with variceal bleeding and ascites are the most common presentations (5). GV account for 10% of variceal bleeding. However, if bleeding from GV occurs, it tends to be more severe, often with detrimental consequences requiring more transfusions. Endoscopic histoacryl therapy is usually recommended for cases of bleeding from isolated GV IGV1 and IGV2 or gastroesophageal varices (GOV) 2 from sites located below the cardia. When the hemorrhage is caused due to GOV1, the use of esophageal varices ligation or histoacryl injections is recommended. However, there

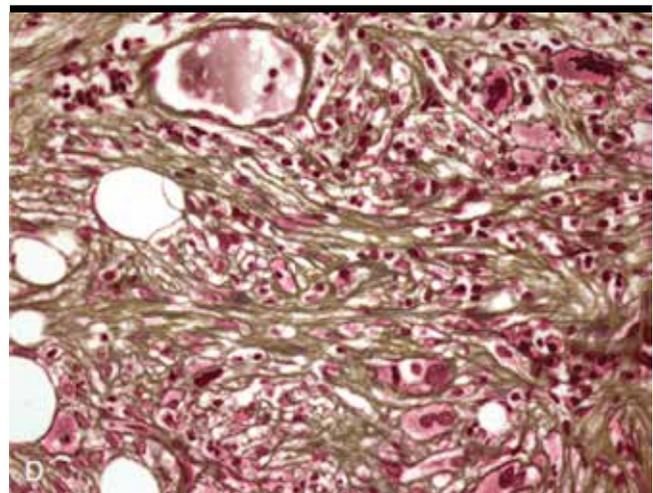


Figure 1. Micrograph of bone marrow biopsy specimen from a patient with primary myelofibrosis (x200)

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Received: **May 15, 2018** Accepted: **May 28, 2018** Available online date: **November 19, 2018**

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DOI: 10.5152/tjg.2018.18324

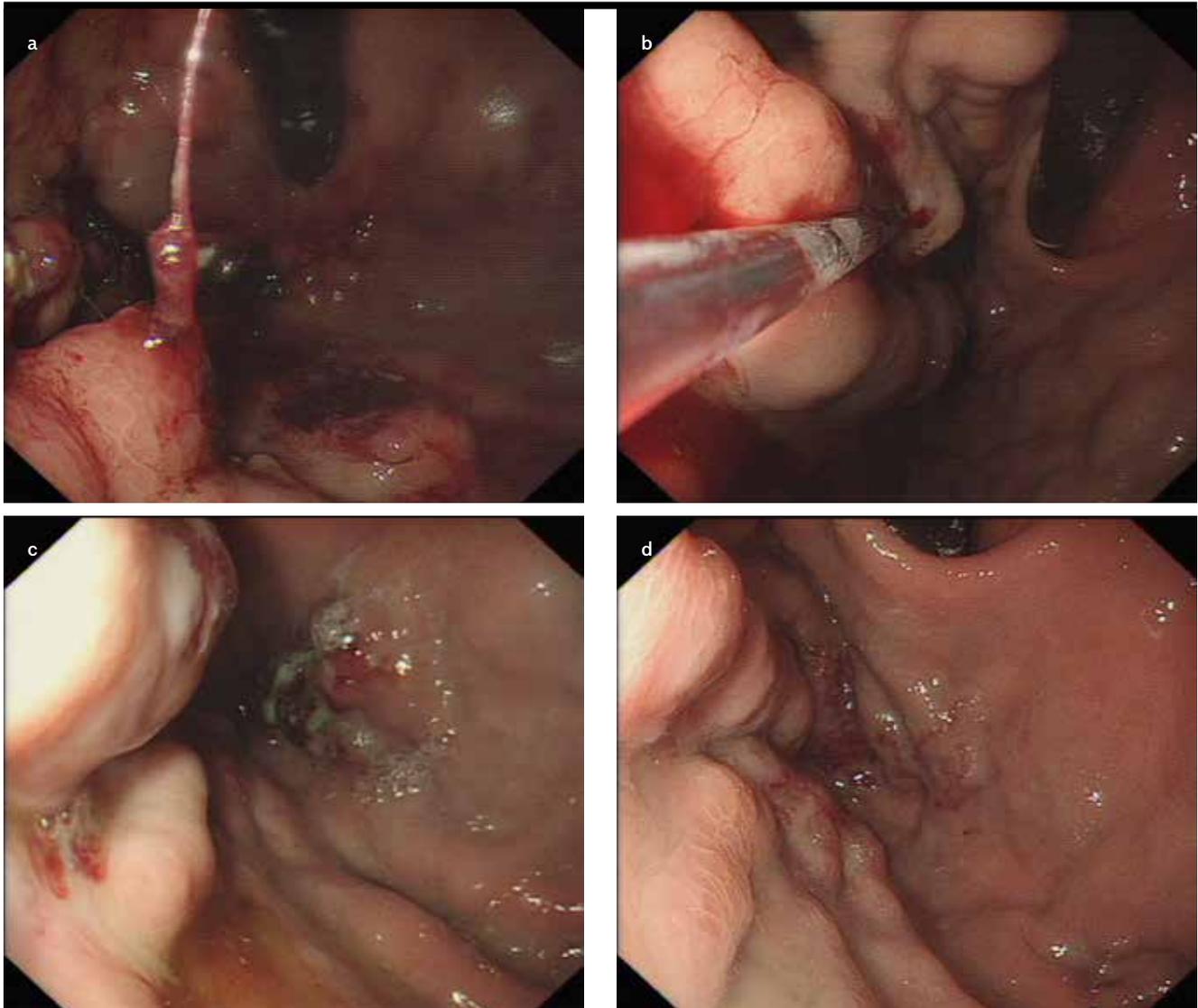


Figure 2. a-d. Gastric variceal bleeding secondary to PMF demonstrated on endoscopy (a); endoscopic histoacryl injection for hemostasis (b); a week after the endoscopic histoacryl injection (c); 9 months after the endoscopic histoacryl injection (d)

is limited data on the efficacy of endoscopic histoacryl injection for reducing rebleeding from GV or mortality in patients with PMF. We found that bleeding from active GV could be successfully controlled with endoscopic histoacryl injection therapy. After a follow-up period of 4-9 months, no rebleeding was observed, suggesting a short-term favorable response.

There is the potential for endoscopic histoacryl injection for the treatment of bleeding from GV in patients with PMF.

Peer-review: Externally peer-reviewed.

Author Contributions: Concept - H.W., J.M., P.L.; Design - J.M., P.L.; Supervision - H.W., P.L.; Resources - Y.J., J.H.; Data Collection and/or Processing - H.W., J.M.; Analysis and/ or Interpretation - Y.J., J.H.; Literature Search - Y.J., J.H.; Writing Manuscript - J.M.; Critical Reviews - H.W., J.M.

Conflict of Interest: The authors have no conflict of interest to declare.

Financial Disclosure: The authors declared that grants to conduct this study were provided by the Science Foundation of Capital Medicine Development (2014-2-2171); and Capital Foundation for Clinical Characteristic Applied Research Projects (Z141107002514132) to Prof Wei.

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