Case Report

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Can argon plasma coagulation be endoscopic recovery treatment in uncontrolled esophageal varices bleeding?

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Abstract

A77-year-old man with hepatitis C, Child-Pugh B cirrhosis whoreceived endoscopic variceal ligation (EVL) for esophageal variceal haemorrhage two years ago and a 47-year old man with alcohol induced Child-Pugh C cirrhosis who received EVL for esophageal variceal haemorrhage one year agoincluded with uncontrolled esophageal varices bleeding. Argon plasma coagulation has been usedas a recovery treatment for controlling of acute esophageal varices bleeding after unsuccessful endoscopic sclerotherapy and EVL . The bleeding was controlled successfully in patients.

Keywords: Esophageal variceal bleeding, Portal hypertension, Argon plasma coagulation

Introduction

Esophageal variceal bleeding is a life-threatening complication of portal hypertension with a six-week mortality rate of approximately 20% [1]. The available data suggest that vasoactive drugs, combined with endoscopic therapy and antibiotics, are the best treatment strategy with endoscopic variceal ligation (EVL) being the endoscopic procedure of choice [2]. Tissue adhesives, endoloops, endoscopic clipping and argon plasma coagulation (APC), have been used in the management of uncontrolled esophageal varices bleeding [3].

Cases

A77-year-old man with hepatitis C, Child-Pugh B cirrhosis whoreceived endoscopic variceal ligation for esophageal variceal haemorrhage two years ago and a 47-year old man with alcohol induced Child-Pugh C cirrhosis who received EVL for esophageal variceal haemorrhage one year agoincluded with uncontrolled esophageal varices bleeding. Laboratory diagnostic findings were the following: alanine aminotransferase, 24 IU/L; total bilirubin, 2.8 mg/dL; albumin, 3.0 g/dL; creatinine, 1.90 mg/dL; blood urea nitrogen, 31 mg/dL; Hb, 12.9 g/dL; platelet count, 80,000 /mm3; prothrombin time, 89.1% and :alanine aminotransferase, 20 IU/L; total bilirubin, 2.0 mg/dL; albumin, 3.2 g/dL; creatinine, 1.45 mg/dL; blood urea nitrogen, 25 mg/dL; Hb, 13.2 g/dL; platelet count, 75,000 /mm3; prothrombin time, 80.3% respectively. Argon plasma coagulation (ICC-200; Erbe Elektromedezin GmbH, Tubingen, Germany) has been usedas a recovery treatment for controlling of acute esophageal varices bleeding after unsuccessful endoscopic injection sclerotheraphy (EIS) and EVL (Figure 1 and Figure 2) and the bleeding was controlled successfully in patients. İnaddition to β blockade medical treatment, secondary prophylaxis of esophageal variceal bant ligation plus APC (three sessions) were done in patients after endoscopic recovery treatment (Figure-3). Esophageal variceal haemorrhage did not occur in two years.

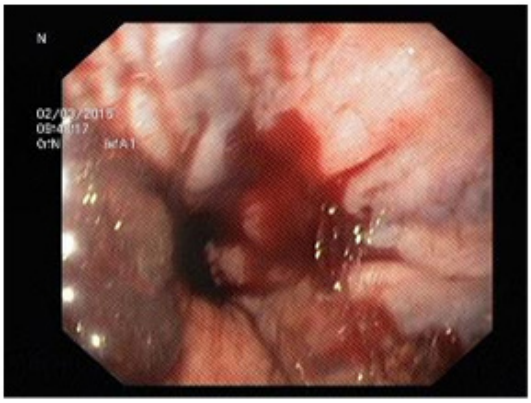

Figure1: Acutesmall esophageal variceal bleeding in distal esophagus.

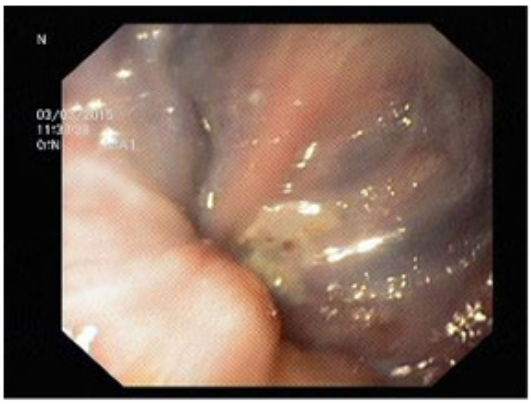

Figure 2: Bleeding was controlledafter APC.

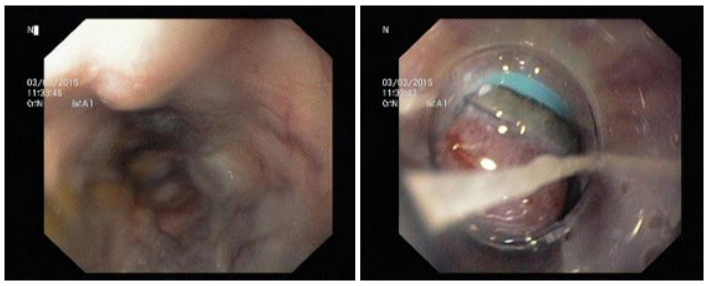

Figure 3: Secondary prophylaxis of esophageal variceal eradication with EVL plus APC after endoscopic recovery treatment.

Discussion

Argon plasma coagulation (APC) is very useful as a consolidation treatment for reducing the recurrence of esophageal varices (EVs) [4]. Also,band ligation plus argon plasma coagulation allows for very rapid eradication of varices, and a low recurrence rate with no obvious recorded complications [5]. EVL plus argon plasma coagulationinduce fibrosis of the esophageal mucosa; result in suppression of variceal recurrence. For actively bleeding esophageal varices, both EIS and EVL are reportedly effective for acute variceal bleeding. The available data suggest that interventional therapy is the best treatment therapy (failure EIS and EVL) in uncontrolled esophageal varices bleeding [6].

Conclusion

To our knowledge, this is the first documented case to report APC used inuncontrolled acute esophageal varices bleeding. Argon plasma coagulation can be endoscopic recovery treatment in uncontrolled esophageal varices bleeding.

References

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