Tulip-bundle technique as rescue hemostatic therapy in a deep Mallory–Weiss tear

An 80-year-old woman who was anticoagulated with rivaroxaban for a previous deep venous thrombosis of the left lower limb presented with a 12-hour history of hematemesis. Her physical examination was unremarkable, and she had a blood pressure of 153/78 mmHg and heart rate of 75 beats/minute. Laboratory test results showed a hemoglobin level of 13.1 g/dL. Upper gastrointestinal endoscopy revealed a deep Mallory–Weiss tear with a visible vessel and active pulsatile bleeding located in a hiatus hernia (Fig. 1a). Because she was anticoagulated with rivaroxaban, mechanical hemostasis with clips (Resolution Clip; Boston Scientific) was selected as the treatment (Fig. 1b) but despite the application of six hemostatic clips, bleeding persisted (Fig. 1c). Subsequently, a tulip-bundle technique was planned (Video 1). A detachable snare (MAJ-254; Olympus, Tokyo, Japan) was placed over the clips (Fig. 1d), which resulted in immediate hemostasis (Fig. 1e). Adjunctive management with nil per os, a proton pump inhibitor as a continuous infusion, metoclopramide, and prophylactic enoxaparin instead of rivaroxaban was instituted. The patient remained asymptomatic and was discharged 3 days later. Mallory–Weiss syndrome accounts for 6%–14% of all cases of upper gastrointestinal bleeding, mainly occurring at the gastroesophageal junction or gastric cardia [1]. The tulip-bundle technique consists of the placement and tightening of a detachable snare around clips [2]. This technique has a range of applications, including hemostasis and closure of perforations and fistulae [2,3]. Moreover, this technique may represent an effective rescue treatment in bleeding that is refractory to initial hemostasis in patients with comorbidities that limit hemostatic options, as highlighted in this report.

Endoscopy_UCTN_Code_TTT_1AO_2AD

Competing interests: None

Ana Ponte, Rolando Pinho, Joana Silva, Jaime Rodrigues, João Carvalho
Department of Gastroenterology, Centro Hospitalar Vila Nova de Gaia, Espinho, Portugal

Video 1
Endoscopic views showing the tulip-bundle technique as rescue treatment for a Mallory–Weiss tear with persistent bleeding despite proper application of several hemostatic clips. The placement of an endoloop around the clips results in the achievement of definitive hemostasis.

Fig. 1 Endoscopic views showing: a a Mallory–Weiss tear with active bleeding located in a hiatus hernia; b placement of a hemostatic clip; c persistent bleeding after the placement of six hemostatic clips; d a detachable snare tightened around the hemostatic clips; e cessation of the bleeding after completion of the tulip-bundle technique.
References


Bibliography

DOI http://dx.doi.org/10.1055/s-0042-100200
Endoscopy 2016; 48: E42–E43
© Georg Thieme Verlag KG Stuttgart · New York
ISSN 0013-726X

Corresponding author
Ana Ponte, MD
Department of Gastroenterology
Centro Hospitalar Vila Nova de Gaia
Rua Conceição Fernandes
4434-502 Vila Nova Gaia
Portugal
Fax: +351-227-868369
ana.ilponte@gmail.com