

Mallory–Weiss Syndrome: Where to Look, How to Detect



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Abstract

Mallory–Weiss syndrome is a common cause of upper nonvariceal gastrointestinal bleeding. Although considered minor, it can occasionally cause severe bleeding and have fatal outcome in high-risk patients. Careful inspection is needed to assess the depth of the tear and the presence of major stigmata of hemorrhage. Endoscopic therapy is rarely required. Mechanical hemostasis by means of clip application or band ligation is considered the option of choice in these patients. This article is part of an expert video encyclopedia.

Keywords

Band ligation; Clips; Endoscopic therapy; Mallory–Weiss syndrome; Standard endoscopy; Video.

Video Related to this Article

Video available to view or download at doi:10.1016/S2212-0971(13)70039-6

Materials

The endoscopic examination is performed with the Olympus therapeutic scope (3.7 mm channel), and the hemoclips used in the video are the Olympus Quickclip™.

Background and Endoscopic Procedures

Mallory–Weiss syndrome (MWS) is defined as upper gastrointestinal bleeding from vomiting-induced mucosal lacerations at the esophagogastric junction. Albeit rare, multiple tears can occasionally be identified, especially in patients with a history of alcohol abuse and repeated vomiting. Typically the MW tear is self-limiting and does not require endoscopic intervention. MWS with active bleeding requires effective hemostasis. Endoscopic techniques described to stop bleeding in such patients include epinephrine injection, hemoclip application, and band ligation.

Comparative studies of the different techniques of endoscopic hemostasis are mainly retrospective or small-sized and therefore there is no clear-cut evidence as to the best option for treatment. Endoscopic hemoclip placement and epinephrine injection have proved to be equally effective and safe for the management of active bleeding in MWS, even in patients with shock or comorbid diseases.¹ As compared to hemoclips plus epinephrine, endoscopic band ligation has been shown to be equally effective in achieving hemostasis,² but was able to decrease recurrent bleeding (0% vs. 18%, $p=.02$).³ In a prospective randomized study to compare the efficacy and safety of mechanical methods of hemostasis, 41 patients with active bleeding from MWS were treated with hemoclips or band ligation with no difference in outcomes.⁴ Therefore, clips

and banding seem to be equally effective and safe for the management of active bleeding in patients with MWS, even in those with shock or comorbid diseases. Band ligation is inexpensive, readily available, and easily learned⁵; recently, a novel technique of closure using the ‘tulip technique’ with clips and endoloop has been described.⁶

Key Learning Points/Tips and Tricks

As in every bleeder, it is important to perform the examination carefully and inspect the mucosa at the esophagogastric junction to assess both the depth of the tear and the presence of high-risk stigmata of recent hemorrhage (active bleeding, exposed vessels, or adherent clots).

In patients with hiatal hernias, performing a retroversion of the scope improves the visibility and helps better assessment of the tear.

Complications and Risk Factors

MWS has traditionally been regarded as ‘minor’ source of bleeding; although the majority of patients have a benign course, in some patients MWS can result in a fatal outcome. Risk factors for mortality in patients with MWS are advanced age, severe comorbidity, and low hemoglobin level.^{7,8}

Scripted Voiceover

- | | |
|-------------|---|
| 00:00–00:32 | Mallory-Weiss syndrome is an upper gastrointestinal bleeding from vomiting-induced mucosal laceration at the esophago-gastric junction. As in every bleeder, it is important to carefully inspect the mucosa, looking for possible tears, assessing both their depth and the presence of stigmata of recent hemorrhage. |
| 00:33–01:07 | Mallory-Weiss tears are usually single, but there can be multiple lacerations at the level of the |

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	esophago-gastric junction, as in this case of an adult male with a personal history of alcohol abuse.
01:08–01:44	The bleeding lesion is usually easily detected in axial view. Sometimes, especially in patients with a hiatal hernia, the retroversion of the scope improves visibility and helps for a better assessment of the tear, as in this case.
01:45–02:00	Mallory-Weiss tear does not usually require endoscopic therapy, except in cases of active bleeding or exposed vessels. Endoscopic hemostasis can be achieved by means of epinephrine injection, hemoclip or banding.
02:01–02:41	There is no clear-cut evidence as to the best treatment option. Compared to epinephrine injection, both clips and band ligation proved superior in terms of reduced risk of rebleeding. Clips and banding are equally effective and safe for the management of active bleeding in patients with Mallory-Weiss syndrome, even in those with shock or comorbid diseases.

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