Mallory-Weiss Syndrome: A Case Report

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Abstract
Mallory Weiss Syndrome (MWS) manifests as a tear in the mucous membrane or inner lining of esophagus-to-stomach junction. Most tears recover naturally in 7–10 days, although MWS might result in considerable bleeding. Severe or protracted vomiting is the most typical cause of MWS. While this kind of vomiting can also be brought on by stomach ailments, it also happens in prolonged alcoholism or bulimia. In the majority of cases, the symptoms will manifest as bloody or black stools, hematemesis, involuntary retching, and stomach pain. The red blood cell count may be low as a result of esophageal bleeding if symptoms point to active bleeding, which the doctor would diagnose with an esophagogastroduodenoscopy (EGD). The National Organisation for Rare Disorders estimates that in roughly 80–90% of MWS cases, the bleeding caused by esophageal tears will stop on its own. If bleeding persists, coagulation therapy and sclerotherapy are the preferred treatments. Famotidine and lansoprazole are used to lessen the production of stomach acid.

Keywords: Mallory weiss syndrome, coagulation therapy, sclerotherapy, Famotidine, lansoprazole

Introduction
One of the frequent causes of acute upper gastrointestinal bleeding is Mallory-Weiss syndrome, which is characterized by longitudinal superficial mucosal lacerations (Mallory-Weiss tears). These tears primarily affect the gastroesophageal junction, although they can also spread distally to affect the stomach's proximal part or lower to middle esophagus.

- Although Kenneth Mallory and Soma Weiss more accurately described this condition as lower esophageal lacerations (not ulcerations) happening to patients with repetitive forceful retching and vomiting after excessive alcohol intake in 1929, Albers first described lower esophageal ulceration in 1833.

- Severe or protracted vomiting is the most typical cause of MWS. This kind of vomiting can happen when one has a gastrointestinal sickness, but it also happens regularly as a result of bulimia or prolonged alcohol consumption.

  - In mild circumstances, the illness can not show any symptoms.

  - Hematemesis is the first symptom to appear in 85% of cases.

  - Melena, lightheadedness, or syncope are additional symptoms that may appear in cases of significant bleeding. The existence of a predisposing gastroesophageal reflux disease (GERD), which is indicated by presence of epigastric pain.

Risk Factors: Heavy alcohol consumption, Bulimia nervosa diagnosis, chronic acid reflux and extreme vomiting.
Diagnosis: EGD is utilized to pinpoint the location of the esophageal tear.

Treatment: Treatment of disorders that result in protracted bouts of severe vomiting is crucial for MWS prevention. The need for endoscopic therapy arises if the bleeding doesn't stop. Sclerotherapy and coagulation therapy are two types of endoscopic therapy. Sclerotherapy uses medication to seal off the blood vessels in the tears and stop the bleeding. In most patients with MW tears the bleeding stops on its own within 72 hours. H2 receptor blockers and Proton Pump Inhibitors are used for healing of oesophagus and stomach. If bleeding continues endoscopic treatments are performed.

Surgical Option: Arteriography: Identifies the bleeding vessel and plug it to stop the bleeding.

Case Report:
A 43 year old male presented to the hospital complaining about black colored stools since 3 days with 3-4 episodes of vomiting per day since 3 days and 1 episode of Giddiness since 1 day. On examination the patient was afebrile and chest was clear. The patient's BP was 100/70 mmHg and pulse rate of 107 b/m.

Patient was suggested for endoscopy which showed mallory Weiss tear with active bleeding s/p Hemoclip – Hemostasis secured. Since the patient had bleeding RBC level was decreased (2 mill/cumm) and hemoglobin is decreased (5.6 gms %) and Serum urea levels are increased (76 mg/dl). The patient was treated with IV antibiotics, PPI's, antiemetics and other supportive medications. After treatment the patient condition was stable and felt better.

Discussion:
Tears mostly happen at the esophagus and stomach. Although the exact mechanism is unknown, there will be a greater transmural pressure gradient between the thoracic and gastric regions as vomiting or retching takes place. The intaluminal pressure will be increasing at the cardio-esophageal junction, which causes barotraumas\(^1\). The most typical cause of duodenal perforation is closed loop injury in a bowel packed with gas. A force that is applied to the abdomen causes subsequent perforation\(^1\). The longitudinal fibers begin to contract at the gastro esophageal junction during vomiting, which causes the pylorus to descend. The pyloric end of the stomach contracts firmly. The patient in this case experienced frequent vomiting episodes, which may be the cause of Mallory Weiss syndrome.

Generally the patients are treated with sclerotherapy and coagulation therapy in this patient coagulation
therapy was given and Hemoclip applied at the site of bleeding to secure Hemostasis and I.V Antibiotics, antiemetics, PPI’s and other supportive medications were given.

**Conclusion:**

Mallory Weiss syndrome is a condition typically manifests as a hematemesis followed by a bout of intense retching or vomiting. The junctional mucosa tears when someone throws up violently. Without medical intervention, the tear normally heals in a few days but in severe cases clips are used during an EGD to repair the tear. Rarely surgery is necessary.

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Followed by the almighty we thank our mentors.

**References**