JMSR
Journal of Medical and Scientific Research

CASE REPORT

A case of Mallory-Weiss syndrome secondary to chemotherapy induced nausea and vomiting

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Abstract

Mallory-Weiss syndrome is a rare complication of chemotherapy induced nausea and vomiting. We report one such case of hematemesis in a patient with chemotherapy induced nausea and vomiting (CINV), secondary to Mallory-Weiss syndrome.

Keywords: Mallory-Weiss syndrome; chemotherapy induced nausea and vomiting (CINV)

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Received 10 April 2016; *Revised* 5 June 2015; *Accepted* 15 June 2015; *Published* 24 June 2016

Citation: Afzal SF, Ramakrishna KA, Saikumar B, Sambasivaiah K. A case of Mallory-Weiss syndrome secondary to chemotherapy induced nausea and vomiting. J Med Sci Res. 2016; 4(3):110-111. DOI: http://dx.doi.org/10.17727/JMSR.2016/4-026

Introduction

Chemotherapy induced nausea and vomiting (CINV) is a well-known side effect of chemotherapy. Mallory-Weiss syndrome (MWS) is an eponymous clinical entity used to describe the hematemesis due to longitudinal laceration in the mucosa at the gastro esophageal junction, caused by forceful vomiting, particularly in alcoholics. It is rarely associated with CINV. There are at least two case reports of MWS after chemotherapy in cancer patients [1]. We present a case of young male with medulloblastoma, on chemotherapy, who had an episode of massive hematemesis, due to tear at gastroesophageal junction, consistent with Mallory-Weiss syndrome.

Case

A 32-years-old man, who never consumed alcohol, nor smoked, underwent gross total resection of posterior fossa medulloblastoma tumour. Subsequently, he received adjuvant radiotherapy, and later he was started on chemotherapy. During initial two cycles of chemotherapy, he had mild to moderate nausea and vomiting which was managed with 5HT3 antagonists.

During third cycle of chemotherapy, he received cisplatin 80 mg intravenously with standard anti emetics and hydration on day one. On day two, patient vomited forcibly, 30 min after having breakfast. The vomitus contained large amount of fresh blood, besides ingested food particles.

An upper gastrointestinal endoscopy was done, which revealed a solitary longitudinal tear (Figure1) at the gastro esophageal junction. Rest of the esophagus, stomach and duodenum were normal. He was closely monitored, and managed conservatively with sucralfate, pantoprazole infusion and fosaprepitant. His coagulation parameters were within normal range and hemogram did not show any fall in hemoglobin. Chemotherapy was suspended for a day, after which he received complete scheduled chemotherapy. Patient continued to receive subsequent chemotherapy cycles with no complications related to this episode.

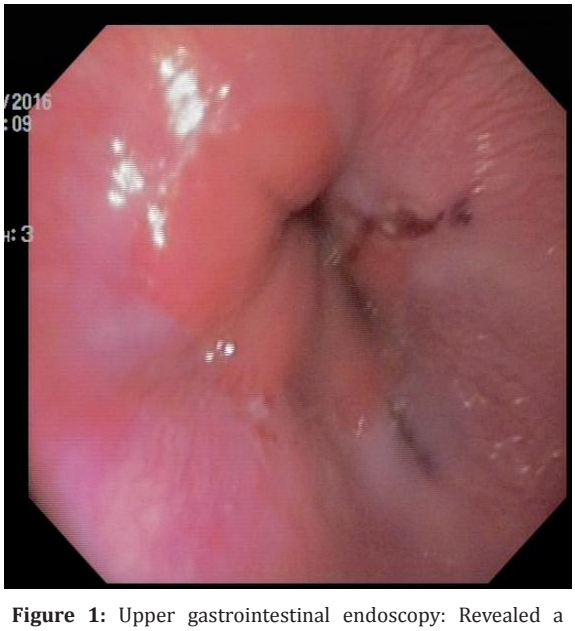

Figure 1: Upper gastrointestinal endoscopy: Revealed a solitary longitudinal tear at the gastro esophageal junction.

Discussion

Mallory-Weiss syndrome (MWS) is a serious form of hematemesis, described more vividly in alcoholics, and also in patients with hiatus hernia [2]. A sudden rapid rise in the intragastric pressure and transmural pressure across the gastro esophageal junction causing a tear in the mucosa, resulting in brisk hemorrhage, has been postulated as the most probable pathophysiology.

Management of MWS generally comprises of conservative medical management. In patients with risk factors for rebleeding [3], various endoscopic treatments such as multipolar electrocoagulation (MPEC) with or without epinephrine injection [4], sclerosant injection, argon plasma coagulation [5], band ligation, and hemoclip placement have been used. MWS generally has a good prognosis. One prospective five year study involving 281 patients with MWS [6], however reported high mortality rates in high risk patients with MWS, comparable to peptic ulcer bleeding.

Hematemesis due to MWS resulting from chemotherapy is rare, although nausea and vomiting are frequent side effects. The present case captures a rare cause of hematemesis in CINV, which could be fatal. A heightened awareness of a possible MWS in patients on chemotherapy, enhances the prompt and effective management of this condition, thus avoiding adverse outcome.

Acknowledgements

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Conflicts of interest

Authors declare no conflicts of interest.

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