Gastrointestinal and hepatobiliary complications following bone marrow transplantation in the recent years – a single center study

Abstract

Background and Aims: Nausea, vomiting, diarrhea and abnormal liver function tests (LFT) are common following both autologous and allogeneic bone marrow transplantation (BMT). The incidence and severity of these complications have decreased in the last few years with the use of less intensive chemotherapeutic and radiation regimens and better supportive care. Nausea, vomiting, diarrhea or abnormal LFTs can occur due to chemo-radiation, infection or graft versus host disease (GVHD). The study aimed to describe gastrointestinal and hepatobiliary complications following BMT at a tertiary care medical center in the recent years.

Methods: A retrospective chart review of patients who presented with nausea, vomiting, diarrhea or abnormal LFTs within three months of bone marrow transplantation at Thomas Jefferson University Hospital between November 1st, 2016 and October 31, 2018 were performed. Baseline demographics, gastrointestinal complications and LFT were collected.

Results: 15 patients underwent bone marrow transplantation between November 1, 2016 and October 31, 2018. Among these patients, nine patients had gastrointestinal complications or transaminitis. The average age of these nine patients was 53 years, seven of them were males and six of them were white. Of these nine patients, seven patients had nausea, vomiting or diarrhea and three patients had abnormal LFTs. Only two patients out of seven patients with diarrhea were positive for Clostridium difficile infection. one patient had diarrhea secondary to regimen related toxicity, one had atypical Crohn’s flare, and cause of diarrhea was unknown in three patients. Three patients had abnormal LFTs secondary to sepsis or medication.

Conclusion: More than half of the patients who underwent BMT had gastrointestinal or hepatic complications. Unlike other studies, we did not have any patients with GVHD. However, Clostridium difficile infection was not uncommon. Regimen-related gastrointestinal symptoms were rare. There were several cases of diarrhea with an unknown etiology. A larger sample size would be helpful in further delineating the incidence and determining trends of various gastrointestinal and hepatobiliary complications following BMT in recent years.