Complete resolution of gastric amyloidosis after autologous stem cell transplantation.

Dinu Cherian  
Jefferson Medical College

Kristin Braun  
Thomas Jefferson University

Neal Flomenberg  
Thomas Jefferson University

Juan P. Palazzo  
Thomas Jefferson University

David Kastenberg  
Thomas Jefferson University

Follow this and additional works at: https://jdc.jefferson.edu/gastro_hepfp

Part of the Gastroenterology Commons, and the Hepatology Commons

Let us know how access to this document benefits you

Recommended Citation
Cherian, Dinu; Braun, Kristin; Flomenberg, Neal; Palazzo, Juan P.; and Kastenberg, David, "Complete resolution of gastric amyloidosis after autologous stem cell transplantation." (2008). Division of Gastroenterology and Hepatology Faculty Papers. Paper 7.  
https://jdc.jefferson.edu/gastro_hepfp/7

This Article is brought to you for free and open access by the Jefferson Digital Commons. The Jefferson Digital Commons is a service of Thomas Jefferson University's Center for Teaching and Learning (CTL). The Commons is a showcase for Jefferson books and journals, peer-reviewed scholarly publications, unique historical collections from the University archives, and teaching tools. The Jefferson Digital Commons allows researchers and interested readers anywhere in the world to learn about and keep up to date with Jefferson scholarship. This article has been accepted for inclusion in Division of Gastroenterology and Hepatology Faculty Papers by an authorized administrator of the Jefferson Digital Commons. For more information, please contact: JeffersonDigitalCommons@jefferson.edu.
As submitted to:

*Endoscopy*

And later published as:

*Complete resolution of gastric amyloidosis after autologous stem cell transplantation.*

Volume 40 Suppl 2, September 2008, Pages E167-168


Dinu Cherian, B.S.¹
Kristin Braun, M.D.²
Neal Flomenberg, M.D.³
Juan Palazzo, M.D.⁴
David Kastenberg, M.D.²

¹Jefferson Medical College
²Division of Gastroenterology and Hepatology, Thomas Jefferson University
³Division of Medical Oncology, Thomas Jefferson University
⁴Division of Pathology, Thomas Jefferson University

Corresponding Author:
David Kastenberg, M.D.
132 South 10th Street
Philadelphia PA 19107
David.Kastenberg@jefferson.edu
Fax 215-503-2578
Phone 215-955-8900
A 48-year-old female with multiple myeloma (MM) and amyloidosis presented with massive upper gastrointestinal (GI) bleeding one week after autologous stem cell transplantation (autologous-SCT). Esophagastroduodenoscopy (EGD) demonstrated necrotic, purple, pigmented, friable lesions throughout the stomach (Figure 1a), along with a bleeding ulcer in the cardia (Figure 1b, Video 1) which was successfully treated with epinephrine (1:10,000) injections. Biopsies demonstrated nodular amyloid deposition (Figures 2) which was Congo red positive. The patient had no further hematemesis and was discharged home 4 days later. Ten months after autologous-SCT, EGD revealed a normal stomach (Figure 3, Video 2) with no histologic evidence of amyloid.

AL amyloid of the GI tract involves the stomach in 8% of cases [1]. Only 1% with gastric amyloidosis manifest symptoms such as bleeding [1,2], which has been attributed to light chain deposition in blood vessels causing increased friability and eventual bowel infarction [2,3]. Characteristic endoscopic findings include thickened folds, mucosal erosions, submucosal hematomas, ulcerations and mucosal friability [2]. Histology demonstrates deposition of amorphous hyaline material on H&E stain which is Congo-red stain positive. Treatment of AL amyloid is aimed at the underlying plasma cell disorder in order to decrease light chain production. High-dose melphalan followed by autologous-SCT induces a complete hematologic response, along with reversal of amyloid dependent organ dysfunction, in a majority of patients in about 3 months [4,5]. This therapy may be associated with significant toxicity, especially in patients with underlying cardiac disease.

There is very limited published data documenting reversal of symptomatic GI amyloid with MM therapy [4,5]. We believe this is the first reported case of complete endoscopic and histologic resolution of GI amyloid, particularly amyloid induced GI bleeding, following autologous-SCT. In carefully selected patients with MM, high-dose melphalan followed by autologous-SCT may be effective for symptomatic AL amyloid of the GI tract.

References


Figure Legend
Video 1 Large ulcer in the cardia containing a bleeding pigmented lesion. Numerous additional lesions are present throughout the stomach which, upon probing, are friable and necrotic.

Video 2 Complete resolution of gastric amyloid 10 months after autologous stem cell transplant.

Figure 1a A large pigmented lesion in the body of the stomach.
Figure 1b Giant ulcer in the cardia containing a large, necrotic, bleeding pigmented lesion.
Figure 2  Gastric biopsy with dense amyloid deposition in the mucosa at high magnification.
Figure 3 Normal gastric cardia and fundus 2 months after autologous stem cell transplant.