

Abstract

Clinical Feasibility of a Standardized Dietary Protocol for Gastrointestinal Graft-versus-Host Disease: A Pilot Study

Elena Oddone¹, Roberta Di Matteo², Francesca Palmisano¹, Michela Lazzarini¹, Chiara Cannici¹, Menada Gardalini², Tatiana Bolgeo²

¹ Department of Internal Medicine, Emergency Care and Structural Admission, SCDU Hematology, Azienda Ospedaliero-Universitaria “SS. Antonio e Biagio e Cesare Arrigo”, Alessandria, Italy

² Department of Integrated Research and Innovation Activities (DAIRI), Azienda Ospedaliero-Universitaria “SS. Antonio e Biagio e Cesare Arrigo”, Alessandria, Italy

(Corresponding Author: mgardalini@ospedale.al.it)

Citation: Oddone, E., Di Matteo, R., Palmisano, F., Lazzarini, M., Cannici, C., Gardalini, M., & Bolgeo, T. (2026). Clinical feasibility of a standardized dietary protocol for gastrointestinal graft-versus-host disease: A pilot study. *International Journal of Health Supplements*, 1(Suppl. 2), 160–161. <https://doi.org/10.82051/ijhs-2026-Suppl2>

Introduction. Diarrhea related to gastrointestinal graft-versus-host disease (GI-GVHD) is a major clinical challenge in patients undergoing hematopoietic stem cell transplantation. Dietary management protocols are widely used to promote stool stabilization, but evidence on their effectiveness remains limited. The aim of this study was to evaluate the clinical feasibility of a standardized dietary protocol in patients with GI-GVHD by longitudinally assessing changes in stool volume, target-range achievement, and stool consistency during treatment.

Methods. A single-arm prospective pilot study was conducted in 8 patients, providing 160 daily observations. Twenty-four-hour stool volume, target-range achievement (100–500 mL/24 h), and stool consistency were monitored daily during the dietary protocol. Baseline characteristics and longitudinal trends were summarized using descriptive statistics. Changes in stool volume were analyzed with a linear mixed-effects model; the probability of out-of-range stool output with mixed-effects logistic regression; and stool consistency with ordinal mixed-effects logistic regression.

Results. Mean baseline stool volume was 403.8 ± 283.6 mL, and stool consistency was predominantly liquid (87.5%). Stool volume significantly decreased over time, with an average reduction of approximately 33 mL/day ($\beta = -32.84$; SE = 8.28; $p < 0.001$). The likelihood of out-of-range stool output also declined (OR = 0.90; 95% CI: 0.85–0.95; $p < 0.001$). Stool consistency remained mainly liquid, with slightly higher odds of more liquid stools over time (OR = 1.37; 95% CI: 1.23–1.53; $p < 0.001$). Descriptive findings also showed increased caloric intake and clinically meaningful stabilization of stool volume.

Discussion. The dietary protocol was associated with reduced stool volume and improved stool output stabilization, although stool consistency remained predominantly liquid. These preliminary findings support the feasibility and potential clinical benefit of dietary management in GI-GVHD and provide a basis for larger confirmatory studies.

Keywords: GI-GVHD, Diarrhea, Dietary Protocol

© The Author(s) 2026. This abstract is published by iEditore and distributed under the terms of the [Creative Commons Attribution 4.0 International License \(CC BY 4.0\)](#).

Funding: This research received no external funding. **Conflict of Interest:** The authors declare no conflict of interest.