Erosive Duodenitis as a Cause of Gastrointestinal Bleeding in Patients on Extracorporeal Membrane Oxygenation: A Case Series

Luciana Tagliari MD; Briana A. Ferreira MD; Gabriel F. Santiago MD; Eduardo Fontena MSc MD; Camila M. Bessa PT MSc; Wdielle M. C. Oliveira PT; André C. Ávila PT; Aloysio Saulo M. I. J. B. B. Junior MD; Lucas S. Cruz RN; Ligia N. Matos RN MSc

Hospital Copa D'or, Rio de Janeiro, Brazil

Introduction: Gastrointestinal bleeding is a recognized complication in patients receiving extracorporeal membrane oxygenation (ECMO), but its etiology is frequently multifactorial and difficult to determine. We describe a case series of patients on ECMO who developed significant gastrointestinal bleeding associated with erosive duodenitis. Methods: We retrospectively analyzed five ECMO patients who presented with upper gastrointestinal bleeding and were diagnosed with duodenitis by endoscopic evaluation. Clinical, laboratory, pathological, and therapeutic data were reviewed. Results: Five patients developed gastrointestinal bleeding due to erosive duodenitis during ECMO support. One patient had duodenal biopsy positive for cytomegalovirus (CMV) infection. In the remaining cases, CMV evaluation, stool infectious molecular panels, investigation for inflammatory bowel disease and celiac disease were negative. Parasitic infections and Helicobacter pylori were excluded. Due to suspicion of lymphocytic duodenitis possibly related to medication exposure, potentially associated drugs were discontinued whenever feasible. Three patients showed clinical improvement after withdrawal of suspected medications, measures to improve abdominal perfusion, high-dose proton pump inhibitor therapy, and sucralfate administration. One patient required rescue arterial embolization due to refractory bleeding, with recurrent hemorrhage and subsequent death. Conclusion: Erosive duodenitis may represent an underrecognized cause of severe gastrointestinal bleeding in ECMO patients. The differential diagnosis should include infectious, inflammatory, ischemia and drug-related mechanisms.

CON EL RESPALDO

Management may require a multimodal approach, including withdrawal of potential offending agents, intensive mucosal protection, and interventional strategies in refractory cases. Further studies are needed to better characterize this complication and optimize treatment strategies in the ECMO population. Mark Bilinyi Ulanja et al. Gastrointestinal Bleed from Erosive Gastritis and Duodenitis: A Sentinel Event of Invasive Lobular Carcinoma of the Breast and a Diagnostic Dilemma. Cureus. 2018 Jun 7;10(6):e2757. doi: 10.7759/cureus.2757

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