

Title:

Post-ERCP bowel evisceration in a liver transplant recipient previously treated with atezolizumabbevacizumab: first report

Authors:

Elena Santos-Pérez, Cecile Gomercic, Maxime Thobois, Anne-Claire Frin, Dann Ouizeman, Geoffroy Vanbiervliet, Michel Rayar, Rodolphe Anty

DOI: 10.17235/reed.2025.11518/2025 Link: <u>PubMed (Epub ahead of print)</u>

Please cite this article as:

Santos-Pérez Elena, Gomercic Cecile, Thobois Maxime, Frin Anne-Claire, Ouizeman Dann, Vanbiervliet Geoffroy, Rayar Michel, Anty Rodolphe. Post-ERCP bowel evisceration in a liver transplant recipient previously treated with atezolizumab-bevacizumab: first report. Rev Esp Enferm Dig 2025. doi: 10.17235/reed.2025.11518/2025.

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.



Post-ERCP bowel evisceration in a liver transplant recipient previously treated with atezolizumab-bevacizumab: first report

SANTOS-PEREZ, Elena¹; GOMERCIC, Cecile¹; THOBOIS, Maxime¹; FRIN, Anne-Claire²; OUIZEMAN, Dann ³; VANBIERVLIET, Geoffroy¹; RAYAR, Michel³; ANTY, Rodolphe³

- (1) Endoscopy Department, University Hospital of Nice, France
- (2) Gastro-intestinal Oncology Department, University Hospital of Nice, France.
- (3) Hepatology Unit, University Hospital of Nice, INSERM U1065 Team 8 "Hepatic Complications of Obesity and Alcohol", Université Côte d'Azur, Nice, France

Keywords: Liver transplant. Post ERCP evisceration. ERCP complication. Inmunotherapy.

Corresponding author:

Elena SANTOS-PEREZ

Endoscopy unit, Gastroenterology

University Hospital of Nice, Archet 2 Hospital, 151 Route de Saint Antoine de

Ginestière

06202 Nice Cedex 3, France

Email: elenasantosperez8@gmail.com

Dear editor,

Hepatocellular carcinoma (HCC) treatment increasingly involves liver transplantation (LT), often after downstaging therapies. Atezolizumab, a PD-L1 inhibitor, combined with bevacizumab, an anti-VEGF agent, is widely used, showing high response rates pre-transplant. However, bevacizumab impairs angiogenesis and can significantly increase the risk of wound dehiscence, infection, and delayed healing after major surgery, including LT.

We report the first case of bowel evisceration through a laparotomy scar occurring immediately after an ERCP procedure in a patient previously treated with atezolizumab and bevacizumab.



The patient, a 44-year-old man with chronic hepatitis B and advanced HCC beyond Milan criteria, received eight cycles of this immunotherapy combination with good tumour response. LT was performed five weeks after the last dose of bevacizumab. Pathology revealed cirrhosis and HCC classified as pT3 N0 M0 R0 (IIA).

Four days after LT, the patient developed cholestatic jaundice and mild acute cellular rejection (BANFF grade 2.1.1/2), which was managed with intensified immunosuppression, including targeting tacrolimus levels of 8–10 μ g/L and administering basiliximab on days 2 and 10 post-LT.

The patient presented a favorable evolution was in good nutritional condition, with no ascites; the surgical wound showed delayed healing with minimal serohematic exudate. Four weeks post-LT, he developed severe acute cholangitis from an anastomotic biliary stricture. An urgent ERCP was performed (fistulotomy, balloon dilation, multiple plastic stent placement; 27 min), without intraprocedural complications. However, immediately after the ERCP ended and while still in the endoscopy room, bowel evisceration through the laparotomy scar was identified (Figure 1). Emergency surgery successfully repaired the defect. Postoperative antibiotics were given for 5 days, graft function fully recovered (a new biopsy was performed during surgery), and the surgical wound healed adequately. A three-month reassessment scan showed no tumour recurrence and regression of biliary dilation.

This first report of evisceration following ERCP highlights the need to delay high-risk procedures whenever possible, as bevacizumab's VEGF inhibition can impair wound healing and increase the risk of dehiscence and evisceration. Current recommendations advise withholding bevacizumab for at least 28 days before elective surgery and resuming no earlier than 28 days after major surgery, once adequate wound healing is confirmed. Nevertheless, urgent scenarios such as cholangitis may still require invasive procedures, and in these situations it is essential to recognize the increased risk of complications and be prepared to address them. Preventive strategies in transplanted patients, such as reinforcing laparotomy sites, may help mitigate this risk.

REFERENCES

- 1. Singal, Amit G et al. "AASLD Practice Guidance on prevention, diagnosis, and treatment of hepatocellular carcinoma." Hepatology (Baltimore, Md.) vol. 78,6 (2023): 1922-1965. DOI: 10.1097/HEP.0000000000000021
- 2. Tabrizian, Parissa et al. "Neoadjuvant atezolizumab plus bevacizumab prior liver transplantation for hepatocellular carcinoma." JHEP reports: innovation in hepatology vol. 7,2 101246. 18 Oct. 2024. DOI: 10.1016/j.jhepr.2024.101246
- 3. Rezaee-Zavareh, Mohammad Saeid et al. "Impact of pre-transplant immune checkpoint inhibitor use on post-transplant outcomes in HCC: A systematic review and individual patient data meta-analysis." Journal of hepatology vol. 82,1 (2025): 107-119. DOI: 10.1016/j.jhep.2024.09.019

- 4. Kohli, Divyanshoo R et al. "American Society for Gastrointestinal Endoscopy guideline on management of post-liver transplant biliary strictures: summary and recommendations." Gastrointestinal endoscopy vol. 97,4 (2023): 607-614. DOI: 10.1016/j.gie.2022.10.007
- 5. Ahn, Ji W et al. "Impaired wound healing secondary to bevacizumab." International wound journal vol. 16,4 (2019): 1009-1012. DOI: 10.1111/iwj.13139



Figure 1. A. Fluoroscopic image showing stricture of the anastomosis at the level of the common bile duct. B. Bowel evisceration through laparotomy scar after ERCP.