

EUR Research Information Portal

Letter to Editor: Screening Colonoscopy in Patients Evaluated for Liver Transplantation: Look Before You Leap REPLY

Published in:
Hepatology

Publication status and date:
Published: 01/01/2019

DOI (link to publisher):
[10.1002/hep.30781](https://doi.org/10.1002/hep.30781)

Document Version
Publisher's PDF, also known as Version of record

Citation for the published version (APA):

Oey, R., Spaander, M., van Buuren, H., & de Man, R. (2019). Letter to Editor: Screening Colonoscopy in Patients Evaluated for Liver Transplantation: Look Before You Leap REPLY. *Hepatology*, 70(5), 1875-1876. <https://doi.org/10.1002/hep.30781>

[Link to publication on the EUR Research Information Portal](#)

Terms and Conditions of Use

Except as permitted by the applicable copyright law, you may not reproduce or make this material available to any third party without the prior written permission from the copyright holder(s). Copyright law allows the following uses of this material without prior permission:

- you may download, save and print a copy of this material for your personal use only;
- you may share the EUR portal link to this material.

In case the material is published with an open access license (e.g. a Creative Commons (CC) license), other uses may be allowed. Please check the terms and conditions of the specific license.

Take-down policy

If you believe that this material infringes your copyright and/or any other intellectual property rights, you may request its removal by contacting us at the following email address: openaccess.library@eur.nl. Please provide us with all the relevant information, including the reasons why you believe any of your rights have been infringed. In case of a legitimate complaint, we will make the material inaccessible and/or remove it from the website.

Although the fecal immunochemical test (FIT) would reduce the total number of screening colonoscopies performed in pre-LT patients, it does not obviate the need for colonoscopy in those patients who test positive. FIT-positive pre-LT patients would still be at risk for the reported postcolonoscopy complications if standard polyethylene glycol (PEG) solution is used for bowel preparation.

Kimura and colleagues evaluated OC-light FIT (cutoff 10 $\mu\text{g/g}$ of feces) in 20,886 average-risk patients; 2,930 patients (8.3%) had a positive result.⁽³⁾ A positive FIT had a positive predictive value of 3.0% for CRC and 20.8% for AA.⁽³⁾ If the same test characteristics of OC-light FIT from that study are applied to the population in the study by Oey and colleagues ($n = 808$), it is expected that 67 (8.3%) patients would have a positive FIT. CRC will be detected in 2 (3%) patients and AA will be detected in 14 (20.8%) patients undergoing colonoscopy. FIT will miss about 30 patients with AA that may progress to CRC after LT in the setting of immunosuppressive therapy.

Furthermore, a recent systematic review and meta-analysis of 31 studies ($n = 120,255$) evaluating FIT at different cut-off values for CRC and AA detection revealed that OC-light FIT (cut-off value 10 $\mu\text{g/g}$) had a sensitivity and specificity of 90% and 91%, respectively, with a false-positive rate of 9%, which is unacceptably high for an annual screening test.⁽⁴⁾ The sensitivity and specificity for detecting AA was 43% and 90%, respectively, with an unacceptably high false-negative rate of 57%.⁽⁴⁾ Moreover, FIT is ineffective for detecting sessile serrated polyps.⁽⁵⁾

Although prospective studies evaluating the use of FIT in pre-LT patients are warranted, colonoscopy remains the screening procedure of choice in pre-LT patients.

Chimezie U. Mbachii, M.D.¹

Ayokunle T. Abegunde, M.D., M.Sc., M.R.C.G.P., F.A.C.P.²

¹Department of Internal Medicine

John H Stroger Jr Hospital of Cook County
Chicago, IL

²Division of Gastroenterology and Nutrition

Loyola University Medical Center

Maywood, IL

REFERENCES

- 1) **Oey RC, van Tilburg L**, Erler NS, Metselaar HJ, Spaander MCW, van Buuren HR, et al. The yield and safety of screening colonoscopy in patients evaluated for liver transplantation. *HEPATOLOGY* 2019 Feb 14. <https://doi.org/10.1002/hep.30562>. [Epub ahead of print]
- 2) Sint Nicolaas J, de Jonge V, Steyerberg EW, Kuipers EJ, van Leerdam ME, Veldhuyzen-van Zanten SJ. Risk of colorectal carcinoma in post-liver transplant patients: a systematic review and meta-analysis. *Am J Transplant* 2010;10:868-876.
- 3) Alsayid M, Singh MH, Issaka R, et al. Yield of colonoscopy after a positive result from a fecal immunochemical test OC-light. *Clin Gastroenterol Hepatol* 2018;16:1593-1597.
- 4) Imperiale TF, Gruber RN, Stump TE, Emmett TW, Monahan PO. Performance characteristics of fecal immunochemical tests for colorectal cancer and advanced adenomatous polyps: a systematic review and meta-analysis. *Ann Intern Med* 2019;170:319-329.
- 5) Anderson JC, Robertson DJ. Serrated polyp detection by the fecal immunochemical test: an imperfect FIT. *Clin Gastroenterol Hepatol* 2017;15:880-882.

Author names in bold designate shared co-first authorship.

© 2019 by the American Association for the Study of Liver Diseases.

View this article online at wileyonlinelibrary.com.

DOI 10.1002/hep.30786

Potential conflict of interest: Nothing to report.

REPLY:

We thank our colleagues for their interest in our study. Although the risk for colorectal carcinoma after liver transplantation may be increased, our study shows that in this particular, vulnerable population the yield of advanced neoplasia detected by colonoscopy is low and is associated with an elevated risk of complications. In addition, we would like to stress the fact that only just over 50% of the screened patients actually underwent liver transplantation. Based on these data, the timing of performing a screening colonoscopy may be reconsidered, e.g., performing screening colonoscopies post-liver transplantation in a subset of patients.

Although the sensitivity of the fecal immunochemical test (FIT) is low for adenoma and serrated lesions, sensitivity for colorectal carcinoma is around 80%. Therefore, FIT may be used as an alternative to screen patients pre-liver transplantation. We agree that if FIT is chosen, the cutoff used will be essential to assure an optimal benefit-risk balance.

We continue to believe that the benefit-harm ratio of screening colonoscopy in all potential candidate patients

for liver transplantation is questionable and that other strategies should be considered and further explored.

Rosalie C. Oey, M.D. 

Manon C. W. Spaander, M.D., Ph.D.

Henk R. van Buuren, M.D., Ph.D.

Robert A. de Man, M.D., Ph.D.

Department of Gastroenterology and Hepatology
Erasmus Medical Center University Hospital
Rotterdam, the Netherlands

© 2019 The Authors. HEPATOLOGY published by Wiley Periodicals, Inc., on behalf of American Association for the Study of Liver Diseases. This is an open access article under the terms of the Creative Commons Attribution-NonCommercial License, which permits use, distribution and reproduction in any medium, provided the original work is properly cited and is not used for commercial purposes.

View this article online at wileyonlinelibrary.com.

DOI 10.1002/hep.30781

Potential conflict of interest: Nothing to report.

Letter to the Editor: Beta-Blockers Are Preferable to Banding Ligation for Primary Prophylaxis of Variceal Bleeding?

TO THE EDITOR:

I read with interest regarding the comparison of therapies for primary prophylaxis of esophageal variceal bleeding.⁽¹⁾ This systematic review provides important updated knowledge for clinicians when deciding on whether to perform prophylaxis of first esophageal variceal bleeding. The study revealed that nonselective beta-blockers may decrease all-cause mortality and that it had a lower risk of serious complications compared with banding ligation. The authors concluded that nonselective beta-blockers may be the initial approach for primary prophylaxis of variceal bleeding. In actuality, the choices between beta-blockers and banding ligation merit further consideration.

It is well demonstrated that nonselective beta-blockers are associated with a higher incidence of adverse events. This may lead to discontinuation of therapy. A hemodynamic study showed that up to 43% of patients with cirrhosis were not responsive to nonselective beta-blockers.⁽²⁾ Banding ligation may be associated with serious adverse events such as ulcer bleeding or perforation; however, the incidence is appreciably low.⁽³⁾ The incidence of postbanding ulcers could be reduced by a longer interval of ligation.⁽⁴⁾ Banding ligation instead of beta-blockers is prone to result in variceal obliteration. The achievement of variceal obliteration could create a long period of freedom from worry of hemorrhage for high-risk patients. These facts may explain why a slight majority of patients and physicians prefer banding ligation over beta-blockers.⁽⁵⁾ It appears that both nonselective beta-blockers and banding ligation could be the initial approach for primary

prophylaxis of variceal bleeding. Apart from patients with intolerance and contraindications, shared decision making may be the most practical approach for patients with high-risk esophageal varices nowadays.

Gin-Ho Lo, M.D.

Department of Medical Research, E-DA Hospital
School of Medicine for International Students
I-Shou University
Kaohsiung, Taiwan

REFERENCES

- 1) Sharma M, Singh S, Desai V, Shah VH, Kamath PS, Murad MH, et al. Comparison of therapies for primary prevention of esophageal variceal bleeding: a systematic review and network meta-analysis. HEPATOLOGY 2019;69:1657-1675.
- 2) Garcia-Pagan JC, Feu F, Bosch J, Rodes J. Propranolol compared with propranolol plus Isosorbide-5-mononitrate for portal hypertension in cirrhosis: a randomized controlled study. Ann Intern Med 1991;114:869-873.
- 3) Lo GH, Chen WC, Chen MH, Lin CP, Lo CC, Hsu PI, et al. Endoscopic ligation vs. nadolol in the prevention of first variceal bleeding in patients with cirrhosis. Gastrointest Endosc 2004;59:333-338.
- 4) Wang HM, Lo GH, Chen WC, Chan HH, Tsai WL, Yu HC, et al. Randomized controlled trial of monthly versus biweekly endoscopic variceal ligation for the prevention of esophageal variceal rebleeding. J Gastroenterol Hepatol 2014;29:1229-1236.
- 5) Longacre AV, Imaeda A, Garcia-Tsao G, Fraenkel L. A pilot project examining the predicted preferences of patients and physicians in the primary prophylaxis of variceal hemorrhage. HEPATOLOGY 2008;47:169-176.

© 2019 by the American Association for the Study of Liver Diseases.

View this article online at wileyonlinelibrary.com.

DOI 10.1002/hep.30856

Potential conflict of interest: Nothing to report.