

PDF hosted at the Radboud Repository of the Radboud University Nijmegen

The following full text is a publisher's version.

For additional information about this publication click this link.

<https://hdl.handle.net/2066/225285>

Please be advised that this information was generated on 2021-10-20 and may be subject to change.

Letter to the Editor

Type C Mucosa in Pouch Surveillance: How Real is the Risk?

Maarten te Groen^{*}, Frank Hoentjen, Lauranne Derikx

Radboud University Medical Centre, Nijmegen, The Netherlands

Corresponding author: Maarten te Groen, MD, Radboud University Medical Center, Geert Grooteplein Zuid 10, 6525GA Nijmegen, The Netherlands. Tel. +31 (0)24 361 1111; Email: maarten.tegroen@radboudumc.nl



Reply to:

Current Practices in Ileal Pouch Surveillance for Patients With Ulcerative Colitis: A Multinational, Retrospective Cohort Study. Samaan *et al.* *Journal of Crohn's and Colitis* 2019;13(6):735–43.

Dear Editors,

We read with great interest the article by Samaan *et al.*, reporting on pouch surveillance in a large cohort of inflammatory bowel disease [IBD] patients. Their primary findings were a wide variation in surveillance practice, with a relatively high rate of colorectal neoplasia development in low-risk patients. Therefore, the authors advocate for uniform pouch surveillance recommendations. We confirm the wide variety in pouch surveillance in our own cohort [27.4% >1 pouchoscopy/3 years, 21% <1 pouchoscopy/10 years] and endorse the need for uniform surveillance guidelines.¹

Two low-risk patients out of 272 IBD patients with ileal pouch-anal anastomosis [IPAA] [0.7%] developed a pouch carcinoma in their cohort. Therefore, the authors recommend a more intensive pouch surveillance strategy in low-risk patients compared to current guidelines. They suggest a pouchoscopy 1 year after IPAA construction in order to stratify patients based upon the presence of type C pouch mucosa, characterized by persistent atrophy and inflammation.² A type C mucosa might be predictive for subsequent development of pouch neoplasia. However, we question the use of type C mucosa for risk stratification due to the following concerns.

First, there is no clear histological definition of type C mucosa. Villous surface density is used for grading, but quantitative cut-offs are not described.² The assessment of type C mucosa is not part of routine histological evaluation in most centres, and limits the implementation of this factor in daily practice. In addition, the evidence for type C mucosa as a high-risk feature for pouch neoplasia is based on a few now dated studies that reported conflicting results.^{2–4} The reported neoplasia risk for type C mucosa varied between 0% and 71% in these studies.

Second, type C mucosa is frequently accompanied by severe pouch inflammation. It is thought that chronic pouch inflammation results in mucosal atrophy with subsequent malignant transformation.³ However, in the two largest cohort studies to date [$n = 1200$ and $n = 3203$ patients], pouchitis was not identified as a risk factor for pouch neoplasia.¹

Third, it is not clear in which time frame type C mucosa develops. As such, one may develop type C mucosa after the first pouchoscopy 1 year following IPAA construction. On the other hand, most patients with

severe pouch atrophy immediately after ileostomy loop closure showed [partial] regression of the atrophic mucosa after 3 years of follow up.²

In conclusion, we confirm a wide variety in pouch surveillance as seen by the authors, emphasizing the pressing need for optimization and standardization of pouch surveillance practices. However, we advocate a different strategy as previously discussed, without stratification based on type C mucosa.⁵

Funding

No specific funding was received for this work.

Conflict of Interest

The authors state no conflicts of interest.

Acknowledgments

No writing assistance was used for this work. The manuscript, including related data, has not been previously published and the manuscript is not under consideration elsewhere.

Author contributions

M.G.: letter design and drafting of the manuscript, final approval of the submitted version; F.H., L.D.: letter design and critical revision of the manuscript, final approval of the submitted version.

References

1. Derikx LA, Kievit W, Drenth JP, *et al.* Prior colorectal neoplasia is associated with increased risk of ileoanal pouch neoplasia in patients with inflammatory bowel disease. *Gastroenterology* 2014;146:119–28.e1.
2. Veress B, Reinholt FP, Lindquist K, Löffberg R, Liljeqvist L. Long-term histomorphological surveillance of the pelvic ileal pouch: dysplasia develops in a subgroup of patients. *Gastroenterology* 1995;109:1090–7.
3. Gullberg K, Ståhlberg D, Liljeqvist L, *et al.* Neoplastic transformation of the pelvic pouch mucosa in patients with ulcerative colitis. *Gastroenterology* 1997;112:1487–92.
4. Thompson-Fawcett MW, Marcus V, Redston M, Cohen Z, McLeod RS. Risk of dysplasia in long-term ileal pouches and pouches with chronic pouchitis. *Gastroenterology* 2001;121:275–81.
5. Derikx LA, Nissen LH, Oldenburg B, Hoentjen F. Controversies in pouch surveillance for patients with inflammatory bowel disease. *J Crohns Colitis* 2016;10:747–51.