

Is Screening Colonoscopy Superior to Diagnostic Colonoscopy?

Andreas Sieg^{1,2*} and Friedrich K¹

¹Department of Gastroenterology, University Hospital of Heidelberg, Im Neuenheimer Feld 410, 69120 Heidelberg, Germany

²Practice of Gastroenterology, Bergheimer Str. 56a, 69115 Heidelberg, Germany

*Corresponding author: Andreas Sieg, University Hospital of Heidelberg, Department of Gastroenterology, Im Neuenheimer Feld 410, 69120 Heidelberg, Germany, Tel: 49 6221 560 ; E-mail: ulla.sieg@t-online.de

Rec date: Oct 3, 2015, Acc date: Oct 5, 2015, Pub date: Oct 11, 2015

Copyright: © 2015 Sieg A, et al. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

Editorial

Screening colonoscopy was introduced in Germany in 2002 due its low complication rate [1]. Every insurant at age 55 or older is entitled to participate. Up to now there are no randomized studies proving a decrease of mortality by this measure. However, numerous other screening methods have shown this benefit such as fecal occult blood test [2-4], immunological stool tests (FIT) [5,6] sigmoidoscopy studies [7,8] imaging (CT [9], MRT [10]), genetic testing which all are diagnostic. This means that a positive test has to be confirmed by a colonoscopy as a gold standard. Cost effectiveness models preferred colonoscopy because of the higher sensitivity towards colorectal neoplasms and because it represents the only therapeutic method until today [11-15].

A recent retrospective multi-centered observational study showed [16] a significant impairment of CRC mortality from indicative colonoscopy (89.4 months ± 3.0) compared to screening colonoscopy (109.6 months ± 4.7) after 8-10 years in 312 patients. Significantly less patients died from CRC after screening compared to patients waiting for symptoms (indicative). This study confirms a former monocentric study [17]. The authors also observed less CRC in screening compared to indicative colonoscopy. Patients with CRC diagnosed during screening colonoscopy lived significantly longer when compared with patients with CRC diagnosed during diagnostic colonoscopy [16].

Thus screening colonoscopy is an important tool in screening for CRC and leads to a lower mortality from it.

Key issues: Now it is clear that screening colonoscopy saves lives. The main critic for screening colonoscopy was that it progresses only the diagnosis without having an influence on mortality. This is completely refuted by a recent research where patients after screening with CRC lived longer.

References

1. Sieg A, Hachmoeller-Eisenbach U, Eisenbach T (2001) Prospective evaluation of complications in outpatient gastrointestinal endoscopy. A survey among German gastroenterologists. *Gastrointest Endosc* 53: 620-627.
2. Mandel JS, Bond JH, Church TR, Snover DC, Bradley GM, et al. (1993) Reducing mortality from colorectal cancer by screening for fecal occult blood. Minnesota Colon Cancer Control Study. *N Engl J Med* 328: 1365-1371.
3. Kronborg O, Fenger C, Olsen J, Jørgensen OD, Søndergaard O (1996) Randomised study of screening for colorectal cancer with faecal-occult-blood test. *Lancet* 348: 1467-1471.
4. Hardcastle JD, Chamberlain JO, Robinson MH, Moss SM, Amar SS, et al. (1996) Randomised controlled trial of faecal-occult-blood screening for colorectal cancer. *Lancet* 348: 1472-1477.
5. Robertson DJ, Imperiale TF (2005) Stool Testing for Colorectal Cancer. *Gastroenterology* S0016-5085: 00772-00776.
6. Greenwald B (2005) From guaiac to immune fecal occult blood tests: the emergence of technology in colorectal cancer screening. *Gastroenterol Nurs* 28: 90-96.
7. Shroff J, Thosani N, Batra S, Singh H, Guha S (2014) Reduced incidence and mortality from colorectal cancer with flexible-sigmoidoscopy screening: a meta-analysis. *World J Gastroenterol* 20: 18466-18476.
8. Lin OS, Kozarek RA, Cha JM (2014) Impact of sigmoidoscopy and colonoscopy on colorectal cancer incidence and mortality: an evidence-based review of published prospective and retrospective studies. *Intest Res* 12: 268-274.
9. de Haan MC, Pickhardt PJ, Stoker J (2015) CT colonography: accuracy, acceptance, safety and position in organised population screening. *Gut* 64: 342-350.
10. Sun L, Wu H, Guan YS (2008) Colonography by CT, MRI and PET/CT combined with conventional colonoscopy in colorectal cancer screening and staging. *World J Gastroenterol* 14: 853-863.
11. Lieberman DA (1995) Cost-effectiveness model for colon cancer screening. *Gastroenterology* 109: 1781-1790.
12. Sonnenberg A, Delcò F, Inadomi JM (2000) Cost-effectiveness of colonoscopy in screening for colorectal cancer. *Ann Intern Med* 133: 573-584.
13. Vijan S, Hwang EW, Hofer TP, Hayward RA (2001) Which colon cancer screening test? A comparison of costs, effectiveness, and compliance. *Am J Med* 111: 593-601.
14. O'Leary BA, Olynyk JK, Neville AM, Platell CF (2004) Cost-effectiveness of colorectal cancer screening: comparison of community-based on flexible sigmoidoscopy with fecal occult blood testing and colonoscopy. *J Gastroenterol Hepatol* 19: 38-47
15. Provenzale D (2002) Cost-effectiveness of screening the average-risk population for colorectal cancer. *Gastrointest Endosc Clin N Am* 12: 93-109.
16. Friedrich K, Grüther L, Zhang C, Gotthard D, Stremmel W, et al. (2015) Reduced mortality in colorectal cancer patients diagnosed by screening colonoscopy. *GI Endoscopy* 2015 82:133-137.
17. Hüppe D, Hartmann H, Felten G, Kemen M, Tannapfel A, et al. (2008) [Effectiveness of screening colonoscopy in a community-based study]. *Z Gastroenterol* 46: 193-200.

This article was originally published in a special issue, entitled: "**Inflammatory Bowel Disease**", Edited by Lukas Milan, IBD Clinical and Research Centre, Czech Republic