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CRC SCREENING

Colonoscopy for Colon Polyp Surveillance: Avoid Recommending Early Surveillance

Dr Philip Schoenfeld
Editor-in-Chief

Philip Schoenfeld, MD, MSEd, MSc (Epi)

Chief (Emeritus), Gastroenterology Section, John D. Dingell VA Medical Center, Detroit, MI.

This article reviews reviews Dong J, Wang LF, Ardolino E, Feuerstein J. Real-World Compliance with the 2020 US Multi-Society Task Force on Colorectal Cancer Polypectomy Surveillance Guidelines: An Observational Study. Gastrointest Endosc 2023; 97:350-56.

Correspondence to Philip Schoenfeld, MD, MSEd, MSc. Editor-in-Chief. Email: EBGI@gi.org

STRUCTURED ABSTRACT

Question: Are endoscopists complying with 2020 US Multi-Society Task Force Guidelines by recommending repeat colonoscopy in 7-10 years after finding 1-2 small adenomas on average-risk screening colonoscopy?

Design: Retrospective cohort study from November 2019 through May 2022.

Setting: Beth Israel Deaconess Medical Center, Harvard Medical School, Boston, Massachusetts.

Study Population: Thirty-three gastroenterologists performing average-risk screening colonoscopy, who were also asked to complete a survey to assess knowledge of new polypectomy surveillance guidelines.

Exposure: Recommendation for timing of surveillance colonoscopy after finding 1 -2 small (<1 cm) adenomas during first average-risk screening colonoscopy.

Outcome: Primary endpoints were adherence to recommendations from 2020 US Multi-Society Task Force Polypectomy Surveillance Guidelines, which extended the timing of repeat colonoscopy from 5-10 years to 7-10 years in low-risk adenomas (i.e., 1-2 small adenomas), high-risk adenomas, sessile serrated polyps, and hyperplastic polyps. Compliance was stratified based on whether gastroenterologists demonstrated knowledge of new guideline recommendations in their survey responses.

Frequency of compliance was calculated for 3 separate periods after publication of updated 2020 US Multi-Society on Colorectal Cancer Polypectomy Surveillance Guidelines: March-May 2021; November 2021-January 2022; and April 2022-May 2022. This was compared to a baseline period, November 2019 to January 2020, which was just prior to publication of updated guideline recommendations.

Data analysis: Compliance with guideline recommendations between the baseline and post-guideline periods were assessed with Fisher's Exact Test and improvement in compliance during the three intervals was assessed with chi-square tests. A mixed-effects logistic regression was used to identify factors associated with noncompliance.

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Results: Among the 33 gastroenterologists, 58% (19/33) completed the survey with 53% (10/19) and 37% (7/19) correctly stating 7-10 years surveillance intervals for patients with 1 small adenoma or 2 small adenomas, respectively. Among 266 first-time screening colonoscopies performed in the baseline period and 532 during the combined post-guideline period, 43% of patients had low-risk adenomas, 18% had high-risk adenomas, and 19% had serrated polyps.

Compliance with guideline recommendations was 8.3% for low-risk adenomas, 88.3% for high-risk adenomas, and 63% for sessile serrated polyps. Compliance with guideline recommendations for low-risk adenomas (i.e., 1-2 small adenomas) increased to 18.6% when limited to gastroenterologists who knew that guidelines recommended 7-10 year intervals based on survey responses. The vast majority of patients with low-risk adenomas were advised to get surveillance colonoscopy in 5 years. There was no significant increase in compliance with guideline recommendations during the three separate periods of analysis in 2021-2022. Noncompliance was associated with finishing training >10 years ago (odds ratio [OR] 1.7; 95% confidence interval [CI]: 1.2-2.3) and endoscopists performing >800 colonoscopies per year (OR 2.0; 95% CI: 1.5-2.6).

COMMENTARY

Why Is This Important?

An old aphorism from Abraham Maslow states that "when all you have is a hammer, then you see every problem as a nail," meaning that we may develop an over-reliance on a familiar or favorite tool. As gastroenterologists, this can lead to an over-reliance on colonoscopy for colorectal cancer (CRC) prevention. However, our focus should be on performing high-quality colonoscopy instead of recommending that it be repeated too frequently! High-quality colonoscopy for CRC screening means that the cecum is intubated with photo confirmation, that the bowel preparation is adequate/good, and that the endoscopist has an adequate adenoma detection rate (ADR), which is facilitated by simply auditing and providing feedback to endoscopists about their ADR, along with doing a second-look in the right side of the colon, and training endoscopists to look for flat serrated polyps.

Unfortunately, as illustrated by this study, many gastroenterologists instruct patients to return for repeat colonoscopy sooner than recommended by guidelines even when they understand and know the guidelines.[1-2] Why does this happen? Although multiple explanations have been offered, many gastroenterologists worry about post-colonoscopy or "missed" CRC and believe that recommending repeat colonoscopy at earlier intervals will prevent this from happening.[1-2] If this is true, then it's an education gap that needs to be addressed. The vast majority of post-colonoscopy or missed CRC occur within 3 years of the index colonoscopy because adenomas were missed.[3] Thus, recommending that a patient with 1-2 small adenomas return in 5 years instead of 7-10 year intervals won't have much impact on reducing post-colonoscopy or missed CRC. In fact, multiple studies demonstrate that these patients with 1-2 small adenomas can wait 10 years or more between colonoscopies[4], and the United Kingdom and European Society of Gastrointestinal Endoscopy recommend intervals of $\geq$10 years when patients have 1-4 small adenomas on index colonoscopy.

Having said that, we also need to ensure that patients with large ($\geq$1 cm) or high-risk villous adenomas actually return for colonoscopy at 3-year intervals. Unfortunately, our piecemeal US health system may let many of these patients slip through the cracks. A recent study from same health care system looked at the Mass General Brigham Colonoscopy Cohort and found that 36% of patients with large or high-risk villous adenomas had not received any surveillance colonoscopy during median follow-up of almost 5 years and that only 21% of these patients had received colonoscopy at the appropriate 3-year interval.[5]

Ultimately, you can't fix a problem unless it's first identified. Therefore, I commend the investigators for identifying this issue, which is the first step in quality

improvement processes.

Key Study Findings

In 2020, a minority of gastroenterologists at one institution knew that the 2020 US Multi-Society Task Force on Colorectal Cancer Guidelines had extended colonoscopy surveillance intervals to 7-10 years if only 1-2 small adenomas were found on average-risk screening colonoscopy. Among gastroenterologists who knew the correct interval based on survey responses, their real-world compliance with this recommendation was only 18.6%.

Caution

This is a single institution study that assessed only 33 gastroenterologists from 2021-2022, and only 57% (19/33) completed the survey assessing their knowledge of 2020 colon polyp surveillance guidelines. Therefore, the frequency of noncompliance with guideline recommendations more broadly is unclear.

My Practice

In my Veterans Affairs (VA) Medical Center practice, I routinely recommend 10-year intervals when I find 1-2 diminutive (1-4 mm) adenomas on average-risk screening colonoscopy. If I find 1-2 small (5-9 mm) adenomas, then I'll usually recommend a 7-year interval. As part of our quality assessment program, a sample of colonoscopy reports are reviewed quarterly to determine the frequency of guideline-adherent recommendations for repeat colonoscopy along with other quality indicators (e.g., cecal intubation rate, adenoma detection rate, frequency of adequate bowel preparation rate, etc).

More importantly, since the VA is a closed health system, I'm fortunate to utilize an automated computer reminder system where primary care providers are alerted and required to send a referral for colon polyp surveillance colonoscopy at the appropriate interval. Therefore, as long as a patient with large or high-risk adenomas continues to see their primary care provider, these patients routinely get repeat colonoscopy at an appropriate 3-year interval. Since most of our patients are dependent on the VA system for their health care needs, this system works well and formal audits of these reminders are also part of our continuous quality improvement processes.

For Future Research

Larger studies about compliance with colon polyp surveillance guideline recommendations may be helpful to quantify the magnitude of this issue. However, qualitative mixed methods research to identify factors that minimize compliance and to develop effective educational or incentive programs to overcome those factors are needed. This would be more beneficial for our patients, especially if that work is followed by implementation research to improve compliance broadly.

Conflict of Interest

Dr. Schoenfeld reports no potential

conflicts of interest.

Note: The authors of the article published in Gastrointestinal Endoscopy are active on social media. Tag them to discuss their work and this EBGI summary!

@ericardolino

@DrJFeuerstein

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