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# Beat colon cancer mortality? Yes we can!

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**Title:** Colonoscopic polypectomy and long-term prevention of colorectal-cancer deaths

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## Summary

The *New England Journal of Medicine* published the results of the National polyp surveillance (NPS) study in reference to colon cancer mortality among patients with colonic adenomas [1]. This is a prospective study of 2,602 patients who were enrolled from 1980 to 1990 to undergo colonoscopy and followed up for a median time of 15.8 years, with a maximum of 23 years. Only higher-risk patients were enrolled (positive findings on barium enema or sigmoidoscopy, positive fecal occult blood test, patients with symptoms, positive family history for colon cancer), all polyps were removed and this study was performed in centers of excellence. Among patients in whom adenomas were removed, 12 deaths from colon cancer occurred in this follow-up period whereas 25.4 deaths were expected in the carefully matched controls of the general population. Previously, these authors had demonstrated that the removal of adenomatous polyps reduced the expected incidence of colorectal cancer [2]. This study emphasizes that the colonic cancers that were prevented were clinically meaningful and led to the anticipated but now proven 53% reduction in colorectal cancer mortality.

## Opinion

What do these results mean to us practicing gastroenterologists? The large number (2,602) of subjects enrolled and the length of follow up (median time 15.8 years, maximum 23 years) make the results of this study very robust. While this study does not address the value of colonoscopy in the screening of healthy low-risk subjects it nevertheless provides indirect evidence that the removal of all polyps in the colon should reduce colon cancer mortality.

There are caveats to this extrapolation. These colonoscopies were performed in centers of excellence. To expect similar results in other institutions, colonoscopy will have to be complete (cecal intubation), the bowel preparation good and the inspection time adequate. Colonoscopy is operator-dependent and only well-trained dedicated gastroenterologists should perform colonoscopy [3]. Not all cancers were prevented. Six of the twelve patients at baseline colonoscopy were younger than age 55 (34-52), some of them with large polyps, multiple polyps and polyps with villous histology. This is in good keeping with our experience that younger age, number of polyps and histology requires a vigilant eye with meticulous follow-up exams. We are not told whether the colon cancer patients had interval colonoscopies consistent with the guideline recommendations.

The methodology did not permit the authors to determine whether the cancers were located in the right colon. Recent data indicate that we must pay special attention to serrated and flat lesions with their dangerous proliferative features. Their recognition can be challenging.

In short, we have the tools and skill to reduce colon cancer mortality. Let us continue with our mission.

## References

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Conflict of Interest: None

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