Screening Colonoscopies Not So Effective, Review Says

By Lila Abassi — April 28, 2016

The first colonoscopy was performed in 1969, and since then the procedure has been improved to make it safer. It's now considered to be the gold standard for colon cancer screening and it's recommended for all individuals over the age of 50, (but based on family history some may require it earlier).

Authors of a recent essay [2], published in the New England Journal of Medicine, argue that other factors are contributing to the decreased incidence of colon cancer, and also colorectal cancer-related mortality. Based on a Cochrane review of nine randomized trials, authors, H. Gilbert Welch, MD, MPH and Douglas J. Robertson, MD, MPH, claim that the 40 percent drop in the number of new cases of colon cancer (incidence) since 1975, and a drop in deaths attributable to colon cancer, are likely the result of other factors, not solely colonoscopies.

They argue that between 1987 and 2005, the number of colonoscopies performed for the purposes of screening, rose from 23 percent to 50 percent of the population, which is too small a difference to account for the drop in new cases of colon cancer. There must be other factors involved.

Three of these could be:

1) Decreased mortality due to better treatments such as improved surgical techniques and pre- and post-operative care, as well as the use of adjuvant chemotherapy.

2) Compared to the past, symptomatic patients are seeking help earlier and be therefore be diagnosed sooner. When combined with improvements in diagnostic techniques, there is less chance of metastatic disease.

3) There is a lower occurrence of colon cancer overall, and this drop is independent of
colonoscopy and polyp removal. This lower occurrence could be multifactorial, for example, lower consumption of carcinogenic foods such as those containing nitrosamines, changes in gut flora, nonsteroidal anti-inflammatories and hormone replacement therapy.

However, not all physicians agree with the conclusions of the NEJM paper.

“Questioning the efficacy and value of colonoscopy-driven, population-based screening may cost lives,” said Thomas Weber, MD, professor of surgery at the State University of New York Downstate Medical Center, in speaking with Medscape. The age group between 24 and 49 do not normally get screened, and Dr. Weber argues that in this age group the incidence of colon cancer has been rising, which argues against the third point the authors made.

The authors do not maintain that screening colonoscopies have not contributed to decrease in colon cancer and death from colon cancer, however, just that the above three factors play a more important role than previously thought. They believe that doctors should avoid exaggerating the “perceived benefits” of the procedure, rather they should encourage a healthful lifestyle through diet and exercise.

Until a consensus is reached, it is important to note that colonoscopies remain very sensitive and specific, meaning they are very good at determining the presence or absence of disease. And, in addition to being diagnostic, colonoscopies can also be therapeutic because precancerous polyps can be removed during the procedure.