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Study Questions Colonoscopy Effectiveness

By GINA KOLATA

For years, patients and many doctors assumed that a colonoscopy was a colonoscopy. Patients who had one seldom questioned how well it was done. The expectation was that the doctor conducting the exam would find and cut out any polyps, which are the source of most colon cancer.

But a new study, published today in The New England Journal of Medicine, provides a graphic illustration of how wrong that assumption can be, gastroenterologists say. The study, of 12 highly experienced board-certified gastroenterologists in private practice, found some were 10 times better than others at finding adenomas, the polyps that can turn into cancer.

One factor distinguishing the physicians who found many adenomas from those who found few was the amount of time spent examining the colon, according to the study, in which the gastroenterologists kept track of the time for each exam and how many polyps they found.

They discovered that those who slowed down and took their time found more polyps.

“We were all experienced colonoscopists,” said Dr. Robert L. Barclay, a member of the group that participated in the study, Rockford Gastroenterology Associates in Rockford, Ill. “We had each done 3,000 or more colonoscopies before the study.”

Yet, Dr. Barclay added, “if our group is representative of an average group, you will see people who take 2 or 3 minutes and people who take 20 minutes” to examine a colon. Insurers pay doctors the same no matter how much time they spend. Gastroenterologists say colonoscopies can help prevent colon cancer, but warn that there is a pressing need for better quality control.

Still, the experts say, the onus remains on patients to ask for data on how proficient their doctors are.

“Patients assume that one colonoscopist is as good as another,” said Dr. Douglas K. Rex, a gastroenterologist and professor of medicine at Indiana University who did not take part in the study. “But these are dramatic differences.”

His own nine-member group, Dr. Rex says, has similar data showing a fourfold difference in detection rates. A paper on that data will be published in January in The American Journal of Gastroenterology.

The issue is of great concern to doctors and patients alike, said Dr. Robert E. Schoen, a gastroenterologist at the University of Pittsburgh Cancer Institute.

"We all agree that if you are doing a colonoscopy, you should do it well," Dr. Schoen said. "It's a huge commitment on the part of the patient, and it's a huge dollar commitment," costing as much as $2,000.

More than four million Americans a year have colonoscopies, hoping to protect themselves from colon cancer. The cancer, which kills about 55,000 Americans a year, is the second-leading cause of cancer death in the United States.

In a colonoscopy, a doctor pushes a flexible scope, called an endoscope, to the top of a patient's colon, near the appendix, and slowly withdraws it, looking for adenomas. Though more than 90 percent of adenomas will never develop into cancer, the best precaution is to remove them. The exam is so effective, guidelines say, that if no polyps are found, the person can wait a decade before being examined again.

The Rockford study was preceded by other signs that colonoscopies are by no means foolproof. But as problems have been pointed out, they have all too often been met with disbelief among doctors, Dr. Rex said.

The first indication that colonoscopies were not as effective as widely believed came with two studies, one in 1991 and a larger one, in 1997, in which patients had two colonoscopies on the same day. Those studies showed that doctors were missing 15 to 27 percent of adenomas, including 6 percent of large adenomas.

Then, in the last few years, two studies of so-called virtual colonoscopies, which use a CT scan to view the colon, found that the rate of overlooked adenomas in traditional colonoscopies was even higher. Patients in those studies had traditional and virtual colonoscopy on the same day. Traditional colonoscopies missed 12 to 17 percent of the large adenomas detected in the virtual colonoscopies. But many doctors dismissed those findings, saying — if they believed them at all — that they applied to other doctors, not to themselves, Dr. Rex said.

Dr. Schoen, for one, said he was a believer. The conclusions of the adenoma detection studies were reinforced, he said, by studies finding that colonoscopies missed not just polyps but actual cancers.

That finding emerged from studies testing ideas about how to prevent polyps, like

taking beta carotene or calcium pills or sticking to a low fat, high-fiber diet.

The patients in all the studies had at least one adenoma detected on colonoscopy but did not have cancer. They developed cancer in the next few years, however, at the same rate as would be expected in the general population without screening.

“They had had a colonoscopy already, some had even had two colonoscopies, and all of a sudden they were coming up with cancer,” Dr. Schoen said. “I said, Whoa. I thought colonoscopy was supposed to prevent all this.”

He concluded that no more than half the cancers arose after the initial colonoscopy. The others, he said, were probably cancers or precancerous polyps missed in the previous colonoscopy or were cancers that grew at the site of a polyp that had been incompletely removed.

The study by the group in Rockford suggests a way to improve colonoscopy: by slowing down. “If you rush things, you miss things,” Dr. Schoen said.

That happens in part because reimbursement rates for colonoscopies have fallen in recent years, and some doctors are doing the exams faster than ever, Dr. Schoen and others say.

“I have heard of people who do it in 30 seconds,” Dr. Schoen said. “Whoosh, and it’s out.”

The Rockford group concluded that doctors should take at least eight minutes to withdraw the endoscope. To remind themselves, they set a timer with a bell that rings once at two minutes, twice at four minutes, three times at six minutes, and four times at eight minutes. Their polyp-detection rate has increased by 50 percent, Dr. Barclay said.

Last spring, a task force for the American College of Gastroenterology and the American Society for Gastrointestinal Endoscopy recommended that doctors track their polyp-detection rate. On average, they should find precancerous polyps in at least 25 percent of men and 15 percent of women 50 and older.

But most have not adopted the recommendation.

Still, Dr. Douglas J. Robertson, a gastroenterologist at Dartmouth College and at the White River Junction VA Medical Center in White River, Vt., said it did not hurt to ask for a doctor’s detection rate.

“If you are met with a total blank stare,” Dr. Robertson said, “that tells you the doctor is really not clued in to quality issues and is not listening at national meetings.”