

In the News

ISSUE: FEBRUARY 2012 | VOLUME: 63:2

Even Experienced Endoscopists Have Room To Improve

by Monica J. Smith

National Harbor, Md.—Even endoscopists who already identify adenomas at a higher than average rate can be trained to do better, according to new research presented at the 2011 American College of Gastroenterology annual meeting, held in November.

“There is considerable variability in adenoma detection,” said Susan Coe, MD, a third-year gastroenterology fellow at Mayo Clinic, Jacksonville, Fla. “Studies report endoscopists with rates in the 60s, as well as those with rates below the guideline recommendations. We wanted to look at adenoma detection and specifically at ways to increase adenoma detection through focused endoscopist training.”

In her research, Dr. Coe found that certain endoscopist behaviors, such as carefully looking behind folds, adequate cleansing, distension of the colon and time spent in inspection, were associated with high adenoma detection rates.

“Unfortunately, most efforts to influence endoscopist behaviors through measures such as forced withdrawal times, discussions with low performers or financial penalties, have not been successful in improving adenoma detection,” Dr. Coe said. That is why “we wanted to see if there was a way that, through an intense training program, we could affect adenoma detection.”

Dr. Coe and her colleagues first measured the baseline adenoma detection rates in 15 endoscopists over 1,200 procedures, and established the overall detection rate at 36%. The endoscopists were then randomized to participate in a training program (“EQUIP”) or to continue routine practice. As in the baseline portion of the study, 1,200 procedures were completed in the second phase of the study as well.

The training consisted of two, one-hour small-group sessions using available literature, still images and video examples. The first session focused on techniques that high adenoma detectors use, as well as the characteristics of easy-to-miss polyps, such as flat and serrated adenomas. The second session focused on recognizing the surface and vascular patterns

created by neoplasia. The training group endoscopists also received personal monthly feedback on their adenoma detection rate, withdrawal time and group averages.

Upon completion of the second part of the study, the eight endoscopists randomized to receive training saw their overall adenoma detection rate climb to 47%—a significant improvement ($P=0.0022$). The rate in the untrained group remained about the same as the baseline rate, at 35%. Improvement in the training group was seen in the detection of polyps of all sizes, shapes, for all procedure indications and the mean number of adenomas detected per patient.

“One of the arguments people could make about this program is that [the endoscopists who received training] are just finding more of the tiny little polyps that don’t mean anything,” Dr. Coe said. “But we found that we had improvement in all size categories, from those less than 5 mm to the large polyps greater or equal to 10 mm.”

There was also a numeric increase in the detection of subtle, flat adenomas, although the study was not powered to pick up a statistically significant change.

“Very large studies show flat adenomas make up 5% to 9% of all polyps; to see if that change was significant would take a much larger study, which we actually have planned,” Dr. Coe said.

Furthermore, adenoma detection improved for all procedure indications, whether screening a low-risk population, patients with a history of polyps or patients presenting with some other diagnosis, such as abdominal pain and diarrhea.

Despite this leap in improvement in the training group, withdrawal times were not significantly affected, “suggesting that better inspection technique, not more time on inspection, was the reason for our change,” Dr. Coe said. “The real take-home message in all this is that you can increase adenoma detection through focused training, and that we don’t really know what the upper threshold is. I think there’s always room for improvement.”

Delbert L. Chumley, MD, immediate past president of the ACG, found the study quite interesting.

“They say you can’t teach an old dog new tricks, but it worked, obviously,” he said.

“Starting now and certainly in the future, reimbursement is going to be quality-based, so it’s important for us—particularly in the area of endoscopy—to continue to perform quality procedures not only to assure reimbursement, but also for our patients’ protection,” Dr. Chumley said. “It would be interesting to see—and I know this study is going to be enlarged—if the data can be verified and applied to a larger group of individuals.”

Dr. Chumley, who is in private practice in San Antonio, mentioned the GI Quality Improvement Consortium, a joint venture by the ACG and the American Society for

Gastrointestinal Endoscopy that includes data on adenoma detection rates that physicians can use to see where they rank among their colleagues.

“It’s a way for those who don’t rank well in practice to take a course or see if there is some other way to improve adenoma detection rates,” he said. “I think those kinds of things are going to come down the line, maybe with the data we acquire from this kind of study.”

Drs. Coe and Chumley have no conflicts of interest to disclose.
