Colonoscopy technique increases polyp detection in far reaches of right colon

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Research exploring the progression of colon polyps to colorectal cancer and evaluating techniques to improve polyp detection was among the clinical science presented at the 75th Annual Scientific Meeting of the American College of Gastroenterology in San Antonio today.

The Progression to Colorectal Cancer in Flat Polyps

Precancerous growths in the colon known as sessile serrated adenomas (SSA) are found in approximately 1 percent of colonoscopy exams. A sessile serrated ademona is a premalignant flat lesion in the colon thought to lead to colorectal cancer through the serrated pathway. To understand the progression of SSAs to dysplasia, Robert M. Genta, M.D., FACG, in a study, "10,000 Sessile Serrated Polyps: Slow Progression to Low-Grade and High-Grade Dysplasia in a Large Nationwide Population," analyzed a large nationwide dataset of over 500,000 patient records from Caris Life Sciences, a specialized gastrointestinal pathology lab.

From among those patients who underwent colonoscopy with a biopsy of abnormal tissue, Dr. Genta and his colleagues identified approximately 41 percent who had non-hyperplastic polyps, those which are not benign. Of this group, approximately 5 percent had sessile serrated adenomas categorized as either low or high dysplasia, reflecting the degree of cellular abnormality.

"The interval for the progression from SSA to SSA with low-grade dysplasia can be estimated to be approximately seven years, and the further progression to high-grade dysplasia can be estimated at an additional four years. These polyps appear to advance at a slower rate than conventional adenomas," commented Dr. Genta.

Colonoscopy Technique Increases Polyp Detection in Far Reaches of Right Colon

An endoscopic technique known as retroflexion, when used in the right side of the colon, may increase the diagnostic yield of polyps, including large adenomas (larger than 10 millimeters) and serrated lesions, particularly in men, older patients and those with polyps found on forward examination according to research conducted by Douglas K. Rex, M.D., FACG and colleagues at Indiana University Medical Center in Indianapolis, "Right Colon Retroflexion Increases Yield of Polyps in the Proximal Colon. Dr. Rex presented his findings at the 75th Annual Scientific Meeting of the American College of Gastroenterology. In retroflexion, the tip of the colonoscope is in a deflected position to better visualize the proximal side of the colon's anatomy.

"Colonoscopy has a significant miss rate for the smallest adenomas, but retroflexion in the right side of the colon could reduce the miss rate associated with lesions on the proximal sides of the folds and flexures in the colon," explained Dr. Rex. In the study, of a total of 1000 patients who underwent colonoscopy, retroflexion in the right side of the colon was successful in 945 patients. The colonoscopists in the Indiana University study identified 500 polyps in 287 patients on forward examination of the right colon, as the colonoscope passed through, and an additional 68 polyps in 58 patients on retroflexion of the scope. Importantly, 41 percent of the patients who had polyps identified on retroflexion had negative exams on forward examination.

The researchers analyzed predictors of successful retroflexion and polyp detection using logistic regression analysis. "The risk of identifying a polyp on retroflexion was three times more likely among those who had a polyp detected on forward view compared to those patients who were negative on forward examination," according to Dr. Rex. While the presence of a polyp on forward view predicted the detection of polyps in retroflexion in this study, the analysis revealed that older age and male gender were significant predictors of finding polyps on retroflexion after a negative forward exam.

Provided by American College of Gastroenterology