CTC Promising As Adjunct to Colonoscopy

BY DAMIAN McNAMARA

ORLANDO — CT colonography continues to show promise as an adjunct to colonoscopy for colorectal cancer screening, according to study findings.

Dr. Ruben D. Acosta and his associates assessed 170 average-risk patients at the National Naval Medical Center in Bethesda, Md. All patients had computed tomographic colonography (CTC) followed by a colonoscopy. Polyp histology was used to compare results from 92 participants with a positive CTC and another 60 randomly selected patients with a negative CTC. Mean age was 56 years, 32% were women, and 82% were white.

In previous studies, the researchers had demonstrated that CTC could detect polyps 6 mm or larger as accurately as colonoscopy on a per-patient basis (Gastroenterology 2006;130:A46).

In the current study, the histology showed that 6 of the 60 patients with a negative CTC had adenoma and 2 had advanced adenoma. In addition, 58% of patients with a normal CTC had at least one polyp detected on colonoscopy, Dr. Acosta said at the annual meeting of the American College of Gastroenterology.

"This underscores the complementary relationship between CTC and colonoscopy programs," said Dr. Acosta, a gastroenterologist at the center.

Of the 348 polyps detected by colonoscopy, 59% were smaller than 6 mm, 26% were 7-9 mm, and 15% were 10 mm or larger. Histology suggested that 167 of these polyps were adenomas (48%). A total of 76, or 46%, of these polyps were noted on the initial CTC report.

However, CTC missed 222 polyps detected by colonoscopy, including 87 hyperplastic polyps and 84 adenomas. In addition, CTC missed seven advanced adenomas (an overall 3% miss rate).

Two of the seven advanced adenomas missed by CTC were smaller than 10 mm (a 0.9% miss rate).

The miss rate for CTC was inversely associated with polyp size, Dr. Acosta said. As expected, 79% of the 222 polyps missed by CTC, but detected by follow-up colonoscopy, were smaller than 6 mm.

Among the 16% of missed polyps in the 7-mm to 9-mm range, 15 polyps were hyperplastic and 17 were adenomas. The remaining polyps that were missed by CTC were 10 mm or larger and included five hyperplastic polyps and five adenomas.

The CTC miss rate for polyps greater than 10 mm was 4.5%. Dr. Acosta said this miss rate is comparable to the rate of large polyps missed with tandem colonoscopy (Am. J. Gastroenterol. 2006;101:343-50). In this systematic review of six studies with 465 patients, researchers found a 2.1% miss rate for polyps 10 mm or larger.

Dr. Acosta reported having no disclosures related to his presentation. ■

FOB Tests Useful in Colon Ca Screening

BY MICHAEL VLESSIDES

BANFF, ALTA. — A colorectal screening program in Ontario has proven successful in detecting high-risk adenomas and colorectal cancer in patients referred because of positive fecal occult blood test results or a family history of colorectal cancer.

"About 2 years ago, the Ontario Ministry of Health announced this new colorectal screening program, which is based on fecal occult blood [FOB] testing for average-risk patients and colonoscopy for those with a first-degree relative with colorectal cancer," said Dr. William G. Paterson at the Canadian Digestive Diseases Week. "And certainly amongst the GI community there was controversy as to whether a screening program based on FOB testing was the best approach," he added.

To answer this question, Dr. Paterson and his colleagues reviewed the charts of 764 patients referred to the program; 122 were referred because of positive FOB tests. Of those, 14 patients were found to have cancer (11.4% diagnostic yield) and 30 had high-risk adenomas (24.6% diagnostic yield).

The remaining 642 patients screened through the program had a family history of colorectal cancer. Eleven cases of cancer (1.7% diagnostic yield) and 37 high-risk adenomas (5.8% diagnostic yield) were found. The yield for this co-

hort was not statistically different between patients whose first-degree relative was diagnosed at age 60 years or younger, or at older than 60 years of age.

Dr. Paterson reported that a separate group of 2,011 patients underwent screening colonoscopy outside the newly developed program; 135 of them were considered to be of average risk.

Among average-risk patients, one was found to have cancer (0.7% diagnostic yield); five others had high-risk adenoma (3.7% diagnostic yield).

"So the yield for those who came with a positive FOBT was significantly higher than all the other routes," said Dr. Paterson, chief of gastroenterology at Queen's University in Kingston, Ontario.

Given the potential importance of positive FOB tests, the investigators also analyzed the data according to the number of positive tests a patient had; data were available for 107 patients with positive FOB test results.

Of the 50 patients who had one positive test, none was found to have cancer, and 10 had high-risk adenomas (20% diagnostic yield). By comparison, 9 of the 57 patients (15.8% diagnostic yield) who had two or more positive tests had cancer, and 20 (35.1% diagnostic yield) had high-risk adenomas.

"More than one positive fecal occult blood test is associated with a statistically significantly higher yield of colorectal cancer," he added. "This suggests that these patients should be triaged for more rapid access to colonoscopy."

Dr. Paterson disclosed that he has no relevant financial interests to disclose regarding this topic.

CDDW is sponsored by the Canadian Association of Gastroenterology and the Canadian Association for the Study of the Liver. ■