

Studies endorse 'virtual colonoscopy'

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NEW YORK (AP) -- Having an X-ray to look for signs of colon cancer may soon be an option for those who dread the traditional scope exam. Two of the largest studies yet of "virtual colonoscopy" show the experimental technique works just as well at spotting potentially cancerous growths as the more invasive method. It's also quicker and cheaper.

The X-rays can help sort out who really needs the full exam and removal of suspicious growths, called polyps. In one study, only 8 percent of patients had to have followup traditional colonoscopies, which are done under sedation and carry a small risk of puncturing the bowel.

But what some people consider the most unpleasant part can't be avoided: drinking laxatives to purge the bowel so growths can be seen.

Still, proponents hope that the newer test will lure those who have balked at getting conventional screening.

"This is ready for prime time," said Dr. Perry Pickhardt, one of the researchers at the University of Wisconsin Medical School who are reporting the results of their study in Thursday's New England Journal of Medicine.



A 3-D image that was computer-generated from a series of X-rays taken by a CT scanner is seen in this handout photo released by the University of Wisconsin Medical School. A study in Thursday's New England Journal of Medicine shows that "virtual colonoscopy" works as well as the more invasive conventional colonoscopy to detect suspicious polyps. (AP Photo/ Courtesy of Dr. Perry J. Pickhardt/ University of Wisconsin Medical School)

A second, federally funded study at 15 sites around the country is meant to be the definitive test of virtual colonoscopy. Results have not been published, but they show the test to be promising.

Colonoscopies are recommended for everyone over 50, but just about half get tested. Colon cancer is the nation's second leading cause of cancer deaths, and an estimated 52,000 people will die from it this year. Screening can save lives by finding growths before they turn cancerous. Colonoscopies, considered the gold standard test, are recommended every 10 years and more frequently after polyps are found.

In traditional colonoscopy, performed by a gastroenterologist, a long, thin tube is inserted and snaked through the large intestines. Generally, any polyps that are spotted, regardless of size, are taken out in the process.

Virtual colonography uses a CT scanner to take a series of X-rays of the colon and a computer to create a 3-D view. A small tube is inserted in the rectum to inflate the colon so it can be more easily viewed. A radiologist then checks the images for suspicious polyps. Since the patient isn't sedated, there's no recovery time required.

But if any polyps need to be removed, the patient must then have a regular colonoscopy to do that.

For the Wisconsin study, Pickhardt persuaded health insurers in Madison to pay for the less expensive virtual colonoscopies and let patients choose between the two exams. The study included 3,120 patients who opted for a virtual colonoscopy and 3,163 who chose the traditional exam.

Dr. David Kim, another of the researchers, said he plans to ask the patients what was behind their decision.

"I think we're bringing people in off the sidelines as opposed to just substituting one exam for another," he said.

About the same number of advanced polyps were found in each group, 123 for the virtual group and 121 for the conventional group. About 8 percent in the virtual group were sent

for same-day colonoscopies for polyp removal. Five percent of the patients had one or two small polyps and they decided to have them watched rather than removed.

Overall, far more polyps were removed in the traditional colonoscopies; the virtual colonoscopies didn't report tiny polyps, which are unlikely to be cancer. In the traditional group, seven had perforated colons and four needed surgery.

Pickhardt, Kim and a third researcher have received lecture or consulting fees from the makers of colonoscopy products and imaging equipment.

A traditional colonoscopy at the Wisconsin hospital is \$3,300 and more if polyps are removed; virtual colonoscopy costs \$1,186. Insurers pay about 40 percent of that charge, Pickhardt said.

Most insurance companies don't cover virtual colonoscopy for screening but that could change if colon cancer screening guidelines endorse it. Virtual screenings are already available at some hospitals and centers for people willing to pay for it.

The American Cancer Society is updating its guidelines, but Robert Smith, director of cancer screening, wouldn't say whether they would now recommend virtual colonoscopy, also known as CT colonography. When the guidelines were last revised in 2003, there wasn't enough data to support it, he said.

"The evidence is accumulating that CT colonography may have a role in primary screening," said Smith.

Early studies of virtual colonoscopy gave mixed results. Then in 2005, the American College of Radiology Imaging Network launched a large study of more than 2,000 patients, to try to resolve the issue. Each volunteer had a virtual colonoscopy followed by a traditional one the same day and the outcomes were compared.

After the results were presented at a meeting last week, the group posted a statement on their Web site saying that preliminary results showed virtual colonoscopy is "highly accurate," similar to traditional colonoscopy. Spokesman Shawn Farley said details wouldn't be released until the study is published, probably around the end of the year.

Dr. Douglas Rex, director of endoscopy at Indiana University Hospital, said that study was key because it was done at several locations. "We should have a pretty good sense of how it's going to perform in practice," he said.

Rex said he has some reservations about virtual colonoscopy because it doesn't lead to the removal of the smallest polyps and exposes patients to radiation.