

CT Scans Gain Favor as Option for Colonoscopy

By RHONDA L. RUNDLE
October 28, 2008; Page D1

When Janice Rodefelf turned 50, her doctor began hounding her to get a colonoscopy. But Ms. Rodefelf was afraid to have the test, which involves snaking a thin tube through the large intestine. It wasn't until she recently was offered a noninvasive "virtual colonoscopy" that she relented.

The test, a type of CT scan in which the patient lies on a table that slides in and out of a tunnel of X-ray detectors, revealed several suspicious growths, called polyps, on the inner wall of Ms. Rodefelf's colon. To remove them, she underwent a standard colonoscopy later the same day. Some of the polyps turned out to be pre-cancerous.

"I'm glad I finally went ahead because those can turn into full-blown cancer," says the 58-year-old retiree in Cottage Grove, Wis.

Virtual colonoscopy, formally known as computed tomographic, or CT, colonography, has been available for some time. But more medical centers are gearing up to offer the procedure at a time when new research shows it can be about as effective at finding large polyps as a standard colonoscopy. The cost of the virtual test can run from \$500 to \$1,500, or less than half the total cost of a standard colonoscopy. But the newer procedure is rarely covered by health insurers for routine cancer screening.

As in Ms. Rodefelf's case, patients who opt for a virtual colonoscopy may not be able to avoid undergoing the standard procedure as well. That's because when large polyps are detected during the virtual test, doctors must perform a standard colonoscopy to remove them.

When smaller polyps are found, doctors aren't in agreement about what to do. All such growths are routinely removed during standard colonoscopy. But CT colonography researchers are still figuring out when it's safe to leave tiny polyps, and how often to repeat the imaging test. The American Cancer Society recommends that a virtual colonoscopy for healthy men and women 50 or older be repeated every five years if no polyps are found. For standard colonoscopy, the group's recommendation for healthy individuals is every 10 years.

Ready For Your Virtual Colonoscopy Closeup?

When suspicious growths are detected in a virtual colonoscopy, patients must undergo a standard colonoscopy to have them removed. At some medical centers, this conveniently can be done the same day.

Hospital or clinic	Price	Standard colonoscopy available same day, if needed
Invision Sally Jobe Denver	\$800	Limited availability
Johns Hopkins Hospital Baltimore	1,000	Coming in January
M.D. Anderson Cancer Center Houston	1,500	Yes
Virginia Commonwealth University Medical Center Richmond, Va.	750	Yes, same-day referral to nearby endoscopy center
Mayo Clinic (Rochester, NY, and Scottsdale, Ariz.)	1,400-1,500	Possibly; ask when booking an appointment
Ronald Reagan UCLA Hospital Los Angeles	505	No
University of Chicago Hospital Chicago	1,153	Yes
University of Wisconsin Hospital Madison	1,200	Yes
Beth Israel Deaconess Medical Center Boston	1,017	Yes, starting this week

Source: WSJ research

Colon cancer is the second leading cause of cancer death in the U.S., with more than 130,000 new cases diagnosed every year. But studies show that roughly half of all Americans 50 and older aren't getting colonoscopies, possibly because the procedure is scary, requires sedation and carries a tiny risk of bowel perforation. Physicians are hopeful that the easier, less invasive virtual colonoscopy will significantly boost screening rates.

"It is one of the most important advances in medicine in the past five to 10 years because colon cancer is so common and so preventable" when polyps are detected early and removed, says Robert Halvorsen Jr., professor of radiology at Virginia Commonwealth University's School of Medicine.

In CT colonography, the X-ray detectors feed data to a computer program that then creates a three-dimensional model of the abdomen and pelvis. The radiologist's view simulates a flight through the colon, giving the procedure its nickname of virtual colonoscopy. Both virtual and standard tests usually require patients to fast the night before and drink foul-tasting laxatives to cleanse the bowel, which makes it easier for doctors to see abnormalities in the colon.

Accuracy Was Questioned

Until recently, virtual colonoscopies' accuracy in detecting polyps has been questioned, partly because results varied widely in tests at different centers. But a large new study conducted at 15 U.S. medical centers by the American College of Radiology Imaging Network, and sponsored by the National Cancer Institute, has convinced more

medical professionals of the test's effectiveness. The results, published in the New England Journal of Medicine in September, "provide evidence that CT colonography is approximately as successful as standard colonoscopy in the detection of colonic polyps," says Dr. Halvorsen, one of the study's co-authors. "It is also much easier for patients, does not require the patient to be sedated, miss a full day of work, or have someone to drive them home," he says.

Many physicians expect the new study to help push the Centers for Medicare & Medicaid Services, which oversees the big government insurance programs, to start covering virtual colonoscopies as soon as next year, a move that private insurers are likely to follow. The agency says its coverage review is set for completion in February.

Some medical centers are getting ready for increased demand. Virtual colonoscopies are generally performed on the same equipment used for other CT scans, which most radiology facilities already have. But centers must acquire specialized computer software to perform CT colonography and train radiologists to read the results. The tests also could provide radiology departments in hospitals and clinics with additional new revenue.

Some medical centers also are rearranging work schedules so that when a radiologist is performing a CT colonography, a gastroenterologist is available in case the patient needs polyps removed; the new study found this occurs among 17% of patients. A good colon-screening service should offer same-day polyp removal because patients shouldn't be forced to endure the distasteful laxative preparation a second time, says Richard Obregon, a radiologist at Invision Sally Jobe, a radiology group in the Denver area that is expanding its colon-screening service. Such coordinated scheduling is already practiced with other screenings, such as mammography programs that offer immediate diagnostic tests.

Return Visit

After Ms. Rodefeld completed her virtual colonoscopy last month, she was sent home and told to continue fasting until her results were reviewed. A couple hours later, she received a call telling her that polyps had been found and a standard colonoscopy would be needed to remove them. "I said 'I don't want to drink that stuff again, so I'll do it today. Let's get this over with,'" she recalls.

The CT imaging test, which took just 15 minutes, was at an outpatient facility affiliated with the University of Wisconsin near her home and she was able to drive herself; the 90-minute colonoscopy was at the university hospital in Madison, further away, and her husband drove her. It required sedation and monitoring that aren't available at the outpatient center. By five o'clock, Ms. Rodefeld was finished and sent home.

"Patients really appreciate that one-stop prep," says Perry Pickhardt, a researcher and professor who established the university's program. Wisconsin's largest health insurers have covered virtual colonoscopy since 2004.

Standard colonoscopies are the most common procedure gastroenterologists perform. CT colonography, meanwhile, is performed by radiologists. That has led to some turf tensions between the two fields. But those tensions are now easing, as most professionals conclude that the new imaging test will increase screening rates and save lives.

Some Risks Seen

Robert S. Sandler, a gastroenterologist and professor at the University of North Carolina School of Medicine, says many people will continue to request a standard colonoscopy. That's because they will prefer a "definitive" test that can detect and remove polyps at the same time, he says. Also, virtual colonoscopies expose patients to small doses of radiation. This "isn't a big risk, but it's not zero," especially when the CT colonography is repeated every three to five years, he says.

But virtual colonoscopies all but eliminate the most serious risk of a standard colonoscopy: perforation of the bowel. The risk is small -- between one and two per thousand tests -- but it can cause severe infection and even death.

"I would never have it done again," says Margery Gould, a 69-year-old retired Los Angeles county employee, who nearly died earlier this year after a series of complications following a botched colonoscopy. Would she have a virtual colonoscopy? "Absolutely," she says, "because it's not invasive."

Write to Rhonda L. Rundle at rhonda.rundle@wsj.com