

“I WAS JUST A COUPLE OF YEARS late,” says Theresa Reilly, 53, from Tyler, Texas. “So when I finally went for my first colonoscopy, they found cancer. It was already quite advanced.”

With no obvious symptoms and no risk factors, the diagnosis was a shock. Reilly chose to have her treatment at Baylor University Medical Center at Dallas.

“I wanted to be at a hospital with doctors who work every day with people who have colon and rectal cancers,” she says. “When I looked at the published colorectal research online, I found physicians who were on the medical staff at Baylor University Medical Center at Dallas.”

Reilly discovered that Baylor Dallas, in conjunction with the National Institutes of Health, is researching new ways to diagnose, treat and even cure colorectal cancer. One of these studies examined a new way to diagnose the disease – without a colonoscopy.



## Suspicious Cells: What's Next?



CT scans use special X-rays to help detect tumors.

The goal of all of these colorectal screenings is, of course, to find cancer early. If cells look suspicious, what's next?

At Baylor University Medical Center at Dallas, there are a number of ways to determine first if growths or cells are cancerous, precancerous or benign, and if and where cancer might have spread.

**Biopsy**, or removal of suspect tissues often done during a colonoscopy, is the best way to determine if cancer is actually present.

**Diagnostic imaging tests** can help determine if and where cancer has spread.

Physicians on the medical staff use **CT scans**, which involve X-rays and a contrast “dye,” to diagnose cancer, as well as to guide a biopsy needle to remove suspicious cells. This same technology is used in the “virtual colonoscopy.”

**Ultrasound, chest X-rays** and **angiography** (also using X-rays) help to formulate treatment plans by identifying where cancer is and is not.

In another interesting new imaging option, patients swallow a pill that contains a very small video camera, lights, battery and transmitter. Called **capsule endoscopy**, or CE, this pill is about the size of a large vitamin and uses a tiny camera to transmit images. Already FDA-approved for examining the esophagus, CE is now under study for use in the colon.

### GENTLER, CHEAPER, EASIER

By waiting two years after age 50 to get a colonoscopy, Reilly is certainly not alone in being late to get a first colorectal cancer screening. Though the procedure offers an extremely effective way to identify colorectal cancer and even prevent it, up to 75 percent of adults who should be screened are not.

“If you just think of the word ‘colonoscopy,’ you react,” says Ajay Goel, Ph.D., principal investigator and senior scientist with the Baylor Research Institute. “Most people just don’t want to go through the prep.”

With so few people adhering to screening guidelines, a multinational team of researchers at the Baylor Research Institute performed one of the largest studies of its kind to develop and test another option: a simple test of a stool sample. Researchers included Dr. Goel and C. Richard Boland, M.D., chief of gastroenterology and physician on the medical staff at Baylor Dallas.

### NO PREP, NO FUSS

In the Sept. 16, 2009, issue of the *Journal of the National Cancer Institute*, the Baylor Research Institute research team published the results. They concluded that their newly developed, simple DNA test of stool samples might be developed into a useful screening test for colorectal cancer.

Unlike colonoscopy, the screening method would involve no bowel cleansing, no anesthesia and no time

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