

# for your digestion

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## Colonoscopy: Gold Standard for a reason

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A number of years ago, there seemed to be a great deal of press in mainstream media and the medical community about the potential benefit of CT colonography (aka CTC or virtual colonoscopy). Initial results seemed to suggest that CTC would render traditional colonoscopy obsolete. What has happened to virtual colonoscopy since then? And what does the future hold?

As most of you know, CTC is a diagnostic imaging modality using reconstructed images acquired during CT or MRI. Studies comparing the sensitivity and specificity of CTC vs. colonoscopy vary, depending on numerous factors, including polyp size, experience of providers, technique, and patient groups. Here's the breakdown:

**The largest meta-analysis demonstrates for large polyps (10 mm or larger) that the sensitivity of CTC ranges between 80-90% compared with the gold standard colonoscopy, which by definition has sensitivity of 100%.**

**For smaller polyps (less than 10 mm), CTC sensitivity drops off considerably to 50-65%.**

**In a head-to-head study of CTC vs. colonoscopy (2,600 patients in 15 centers), the sensitivity of CTC in finding polyps 10 mm or larger was 90%, specificity 86%, and negative predictive value was 99%. For polyps 6 mm or smaller, the sensitivity was 78%. (NEJM 2008; 359 (12): 1207 – 17).**

Screening procedures must be highly sensitive to be clinically effective. While respectable, a sensitivity rate of 78-90% is not sufficient to recommend community-wide screening at this time.

You may have heard that CTC is more comfortable than colonoscopy, which is not necessarily true. Both modalities require a full bowel prep (universally considered the worst part of the experience).

In a study of 614 patients who underwent each of three modalities: CTC, colonoscopy, and ACBE (pretty amazing that 614 patients consented to all three!), the preference for a repeat procedure was colonoscopy first, followed by CTC and lastly ACBE. (Am J Med 2006; 119(9): 791-9). Perhaps, more than anything, this is a testament to the effects

of Fentanyl and Versed. Procedural amnesia is a wonderful thing!

A stated advantage of CTC is the fortuitous discovery of something outside the colon. Rates of incidental extracolonic findings during CTC have ranged from 15-69%. Clinically significant findings that lead to additional tests occur in 4.5-11% of cases, with only a few patients benefiting from invasive management.

What about cost? CTC may cost less per test, but the broader costs appear to be far greater. In one analysis from Canada, screening CTC would increase costs to society by \$2.7 million annually, due to the need to perform colonoscopy on all patients with CTC findings. This study also took into account a possible increase in death rate from missed adenomas. (Gut 2003; 52(12): 1744-7).

In another analysis of CTC in evaluating patients with hemoccult positive stools, CTC was found to be less effective, less accurate and more costly than colonoscopy. It's also important to note that CTC is not covered by most insurance companies as a screening test.

The most compelling reason to continue recommending colonoscopy over CTC is the ability to perform therapeutic intervention during the diagnostic procedure, thus eliminating the need for a second bowel prep. Clinical benefit is not derived from simply finding polyps, but in removing them.

It is my opinion that CTC will continue to improve. Eventually, its role will likely become an adjunct to colonoscopy, not a replacement. Whatever can be done to decrease barriers to colon cancer screening should be welcomed. Until then, colonoscopy remains the gold standard.

Remember, colonoscopy saves lives! From our perspective, "up yours" is a good thing.

*We invite your comments and suggestions for topics in future editions. Also, if you would rather receive this newsletter electronically or not at all, e-mail [newsletter@eugenegi.com](mailto:newsletter@eugenegi.com).*



Dr. William Wu and wife, LuAnn, atop South Sister.

### About William Wu, M.D.

*Devoted to his patients, family and profession, "Duke" Wu is passionate about the prevention and early detection of colon cancer. "The amount of trust granted to me by patients, simply by virtue of our profession, is an honor I do not take lightly," says Dr. Wu. As an active member of University Fellowship Church, Dr. Wu's Christian faith is a profound source of purpose, peace, and comfort to him. An avid tennis player and cyclist, Dr. Wu will embark on his second 500-mile bike ride across Oregon this year; his first long ride was in 2009.*





## Be a role model to your patients

*"I've had my screening colonoscopy, and it wasn't that bad."*

If you are over 50, that's something you should be telling your patients when you talk with them about having a colonoscopy. And if you or your patient is African American, screening should begin even earlier, at age 45.

According to the American Cancer Society, colon cancer is the third most commonly diagnosed cancer in men and women and the second leading cause of cancer-related deaths in the United States, killing nearly 51,370 people each year. And yet it's the most preventable type of cancer.

We should be encouraging, even insisting that patients have a colonoscopy every 10 years. For patients who have polyps removed during a screening, a 3- to 5-year follow-up may be recommended.

The point of colonoscopy is not only to find

cancer, but also to prevent it by catching benign growths before they become malignant.

The five-year relative survival rate for patients whose colon cancer is treated in an early stage is greater than 90%, according to the American Society for Gastrointestinal Endoscopy (ASGE).

Unfortunately, only 39% of colon cancers are found early. Once the cancer has spread to nearby organs or lymph nodes, the five-year relative survival rate decreases dramatically.

In spite of 10 years of increased awareness, colon cancer screening remains infrequent. While screening rates have improved, only 50% of those who should be screened actually are screened. If colonoscopy is so effective, why then aren't more people having them?

The most common reason patients cite for not getting a colonoscopy is that their doctor did not discuss it with them. The next most common reason is fear or avoidance of the preparation.

While the prep can be difficult, a colonoscopy is well worth a single night of discomfort. And it's up to you, as physicians, to stress that fact with your patients, right up until the day they've had one. No one should be let off the hook.

Colonoscopy is the best, but CTC, flexible sigmoidoscopy, fecal occult blood testing, fecal immunochemical testing, and fecal DNA testing would each be better than nothing.

March is Colon Cancer Awareness Month, a good reminder to talk with your patients. Your efforts as a primary care provider are critical to the success of colon cancer screening. As the largest and most experienced digestive specialty group in Lane County, you can rest assured that your patients are in good hands at Eugene Gastroenterology Consultants, P.C.

And if you are due or overdue for a colonoscopy – don't wait. As the saying goes: what's good for the goose is good for the gander.

