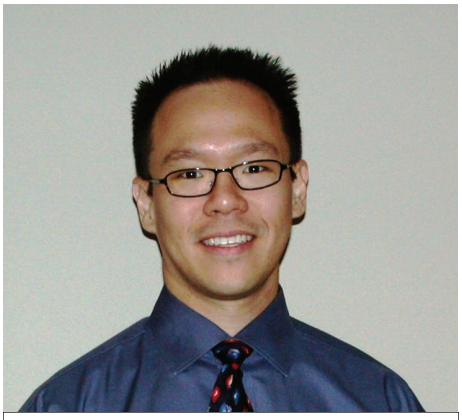
Spring 2006

Reading Time: 5 minutes

FROM THE DESK OF: TERENCE ANGTUACO, M.D.

# Capsule Endoscopy News

# High-Tech Solution: Wireless Small Bowel Capsule Endoscopy



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Prior to August 2001, the small bowel could only be completely examined with invasive surgery-assisted endoscopy. The understanding of small bowel pathologies has rapidly evolved since the availability of wireless capsule endoscopy. This technology has allowed gastroenterologists to view the entire small bowel via a non-invasive method. Soon, some conventional knowledge regarding small bowel diseases will be challenged by data derived from direct and complete visualization of the small bowel. The main limitation of capsule endoscopy is its inability to treat or biopsy diagnosed lesions. However, the recent availability of a new tool called "double balloon enteroscope," developed by Fujinon, Inc., will allow directed diagnostic and therapeutic interventions.

Through this easy-to-read and brief newsletter, I would like to share with you some exciting news in the world of wireless capsule endoscopy and other related topics.

## Has Small Bowel Capsule Endoscopy Replaced Small Bowel X-rays?

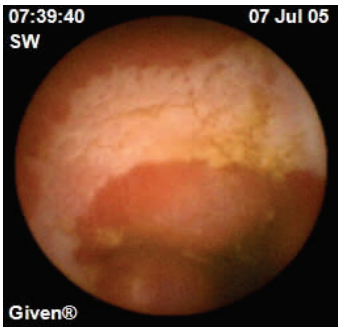
How often have you ordered a small bowel follow-through (SBFT) x-ray for work-up of iron-deficiency anemia and found a possible source? How often has a SBFT x-ray led you to diagnose Crohn's disease? Likely, not very often. Small bowel capsule endoscopy was found to have:

- Superior diagnostic yield when compared to SBFT x-ray (85% vs. 15%) (*Gastroenterology 2002;123:999-1005)*
- Superior diagnostic yield when compared to enteroclysis (*Am J Gastroenterology 2003;98:1295-8)*

Small bowel capsule endoscopy is now considered the gold standard for small bowel imaging. It was also approved by the FDA as a first-line tool in the evaluation for small bowel abnormalities.


**Small Bowel Capsule Endoscopy**

- 1-1/8 inch long and 3/8 inch wide
- Non-invasive and painless
- No bowel preparation required
- No sedation required
- For suspected Crohn's disease and anemia of unknown source



LRDC

**FROM THE DESK OF: TERENCE ANGTUACO, M.D.**

*Mission Statement: To provide medical care with a true sense of service and a constant desire for excellence.*

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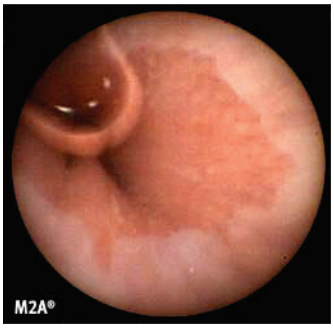
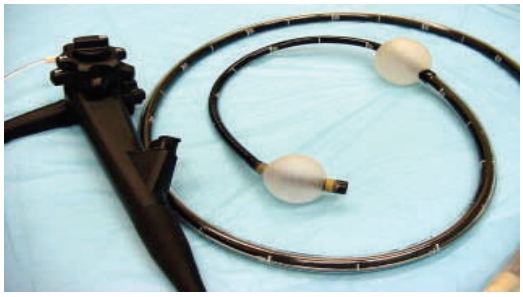
### Esophageal Capsule Endoscopy

- FDA-approved for visualization of the esophagus in adults
- Screening tool for Barrett's esophagus and esophageal varices, and evaluation of refractory acid reflux disease
- Issues regarding coding and payment by health insurance companies have not been fully established
- Excellent image quality




# Breaking News

### Double Balloon Enteroscopy (DBE): State-of-the-Art Technology in Small Bowel Endoscopy



The double-balloon enteroscope developed by Fujinon, Inc., uses an over-tube and a balloon system controlled by a specialized pump, which allows pleating of the small bowel onto the endoscope. This system makes advancement of the scope beyond the reach of current conventional enteroscope possible. A complete examination of the entire small bowel can often be achieved with DBE. It also allows biopsy and treatment of mid to distal small bowel lesions without the need for invasive surgery. This technology is now available in a few centers in the United States and could soon be available in Little Rock.

### Believe It or Not: The Ultimate High-Tech Wireless Capsule Endoscopy Is Coming

- A capsule camera for the colon will be available in 2007. Clinical trials in the U.S. are about to begin. It's role and effectiveness in colon cancer screening will be anxiously awaited.
- A stomach-specific capsule camera is being developed.
- A remote-controlled capsule camera prototype that can be propelled forward or backward inside the intestinal tract is under investigation. Also being tested is a capsule camera prototype that has the ability to obtain brush biopsies, fluid aspiration, and tissue biopsy.