

How Technology is Affecting Polyp-Detection Rates

Copyright 2010 by Virgo Printing

<http://www.endonurse.com/>

By: Frank S. Fillciotto

Posted on: 12/21/2009

Over the past few years, endoscope manufacturers, seeking to provide the best quality optics for physicians, have developed endoscopes equipped with varying types of imaging technology. Now, endoscopes range from the most basic standard definition (SDTV) to 1080 high-definition (HDTV) images. The advancement of HDTV visualization has positively impacted both surgical and gastroenterology suites alike by providing physicians and surgeons with exceptional clarity and visibility to easily examine subtle changes in the mucosal tissue and fine structures, such as capillaries.

Today's HDTV images are proving to be more than a pretty picture, they are demonstrating clinical value by helping physicians find more adenomas.

In fact, during Digestive Disease Week 2009, physicians from the Mayo Clinic, **Lafayette General Endoscopy Center** and Carl T. Hayden VA Medical Center presented studies documenting significant increase in polyp-detection rates when using the latest-generation HDTV endoscopes from Olympus. While all three independent study designs differed, each revealed the same conclusion: that endoscopes with HDTV, wider field of view and close focus improve the detection rates of polyps, colorectal lesions and adenomas. The compelling results range from a minimum of 22-percent increase to a 65-percent increase in adenoma detection rate. Refer to the below reference publications for additional details.

In addition to HDTV imaging, Olympus has introduced a new innovation: Narrow Band Imaging™ (NBI), a proprietary technology developed to enhance the contrast of fine surface structures and capillary patterns allowing doctors to study and see tissue in a new light. Together, the greater resolution of HDTV and the enhanced contrast of NBI are setting new standards in the industry of imaging.

Frank S. Fillciotto is the Executive Director of Technical Marketing for Olympus' Medical Systems Group. For 13 years, he has helped develop endoscopic imaging modalities and tools for the organization's healthcare solutions business.

Reference:

Mayo Clinic, Jacksonville, Fla. Buchner AM, et al, The Use of High Definition White Light Colonoscopy Leads to Higher Adenoma Detection Rates Compared to Standard Definition White Light Colonoscopy. An Effectiveness Study in 2011 patients. *Gastroenterology*, 2009 May; 136 (5): A-130.

<http://download.abstractcentral.com/DDW2009/myddw2009/855.html>

Lafayette General Endoscopy Center (formerly Saints Streets Endoscopy Center), Lafayette, LA. Abshire, SG, Claibourne, CP, Williamson, MM. A Comparative Study of High-Definition Colonoscopic Screening Versus Traditional Definition Colonoscopic Screening. *Gastrointestinal Endoscopy*, 2009 Apr; 69 (5):AB320.

<http://download.abstractcentral.com/DDW2009/myddw2009/T1530.html>

Carl T. Hayden VA Medical Center, Phoenix, Ariz. Thomas, JR, Gerkin, RD, Karasek V, Brichler, B, Gilani, N. Newer Generation Colonoscopes Do Increase Detection of Polyps and Adenomas in Patients Undergoing Screening Colonoscopy. *Gastrointestinal Endoscopy*, 2009 Apr; 69 (5): AB229-AB230.

<http://download.abstractcentral.com/DDW2009/myddw2009/M1390.html>