Endoscopy Techniques for Barrett's Compared

BY MITCHEL L. ZOLER
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COPENHAGEN — High-resolution, white-light endoscopy was as good as more targeted endoscopy methods for diagnosing high-grade dysplasia or early cancer in patients with Barrett's esophagus, based on study results from 28 patients.

"The ability of an endoscopist to detect lesions in overview is more important than targeted imaging. For detecting lesions in Barrett's esophagus, high-quality, white-light imaging is the most important technique" available today, Jacques Bergman, M.D., Ph.D., said at the 13th United European Gastroenterology Week.

Autofluorescence endoscopy using red light may have potential to improve overview detection of dysplasia and early cancer, but this must be proved in further studies, said Dr. Bergman, a gastroenterologist at the Academic Medical Center, Amsterdam.

The study he reported tested two other new methods for improving endoscopy sensitivity: indigo carmine chromoendoscopy (ICC), and narrow-band imaging (NBI).

ICC uses indigo carmine stain to improve visualization of dysplasia. NBI uses filters to produce red-, blue-, and green-light images that highlight different aspects of the esophageal mucosa. For example, blue light, with its shorter wavelength, provides good resolution in the superficial mucosa, while red light, with a longer wavelength, better images deeper tissue.

The study included 17 patients who had been referred to the Academic Medical Center because of suspicion of high-grade dysplasia or early cancer, 6 patients who had undergone treatment for high-grade dysplasia, and 5 patients with Barrett's esophagus who were in a routine surveillance program.

The 28 patients were randomized to an initial examination by high-resolution endoscopy with white light, plus either ICC or NBI.

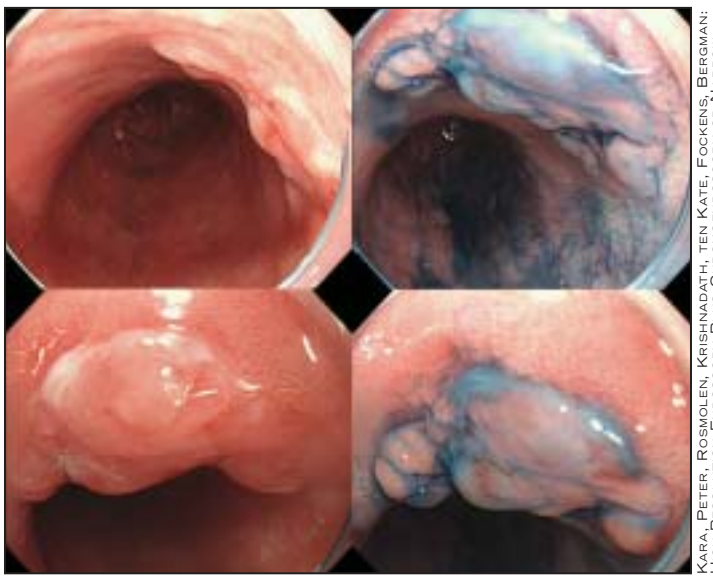
The examination took two biopsies from any identified abnormalities plus random biopsies at 2-cm intervals throughout the area affected by Barrett's esophagus. Patients then underwent a second examination 6 weeks later using the alternate imaging method.

The combined imaging and biopsy data were used to make a definitive diagnosis for each patient.

Overall, 14 patients were determined to have high-grade dysplasia or early cancer, 9 had low-grade dysplasia, and 5 had no dysplasia. Of the 14 patients (93%) with high-grade dysplasia or early cancer, 13 (93%) were diagnosed by ICC, compared with 12 (86%) diagnosed with NBI, Dr. Bergman reported.

But the study's aim was to assess the ability of each method to do targeted imaging. By this standard, both methods flagged lesions for biopsy that identified high-grade dysplasia or early cancer in 11 of the 14 patients (79%).

All of these 11 patients were also diagnosed with high-grade dysplasia or early cancer by high-resolution, white-light endoscopy alone, showing that this method is as good as ICC or NBI for the overview identification of significant disease. "The high sensitivity of white-light endoscopy reduces the potential, added value of ICC and NBI," Dr. Bergman said. ■



KARA, PETER, ROSMOLEN, KRISHNADATH, TEN KATE, FOCKENS, BERGMAN: HIGH-RESOLUTION ENDOSCOPY PLUS CHROMOENDOSCOPY OR NARROW-BAND IMAGING IN BARRETT'S ESOPHAGUS. ENDOSCOPY 2005;37:929-936. ©GEORG THIEME VERLAG KG

High-resolution white-light endoscopy (left), indigo carmine chromoendoscopy (right) yield views of a malignant lesion.

Good Functional Status and Quality of Life Found After Esophageal Cancer Resection

BY ROBIN SEATON JEFFERSON
Contributing Writer

ST. LOUIS — Little is known of the functional status and quality of life of long-term survivors after curative resection for esophageal carcinoma.

"Clearly, a better understanding of the functional outcome of life of long-term survivors is needed in this new era of health care," Claude Deschamps, M.D., told attendees of a thoracic surgery meeting sponsored by Washington University.

Because the incidence of adenocarcinoma of the esophagus and gastroesophageal junction is increasing, "Endoscopic surveillance for Barrett's disease will very likely lead to earlier cancer detection and resection, and possibly improved long-term survival," said Dr. Deschamps, professor of surgery at the Mayo Clinic College of Medicine in Rochester, Minn.

Esophagectomy is currently the standard of care in esophageal carcinoma, Dr. Deschamps said.

"Appropriate tools to measure outcome, however, are limited and development of such instruments will become increasingly important in the future if surgeons are to better plan preoperative counseling, surgical approach, and postoperative care."

The patient's perspective on quality of life is crucial, he said. "We are in an era during which health care outcome will increasingly be evaluated from the patient's point of view."

Dr. Deschamps cited J.D. Kirby, founder of the Oesophageal Patients Association, who suggested nine elements of a good quality of life after esophagectomy. These include the ability to eat adequately and enjoy it, to consume alcohol moderately as desired, to eat and drink socially, to have weight stability, to sleep comfortably in a normal position, to be free of pain, to earn one's living, to participate in sports or hobbies, and to have an unimpaired libido.

"Health outcome is better measured by using general health measures and traditional biomedical tools synchronously," Dr. Deschamps said "We prefer to combine a questionnaire aimed at upper- and lower-digestive functions with a quality-of-life survey."

"We recently reviewed our experience with function and quality of life after esophagectomy for high-grade dysplasia in Barrett's esophagus," he said. From June 1991 through July 1997, 54 consecutive patients underwent esophageal resection for Barrett's esophagus with high-grade dysplasia (HGD) at the Mayo Clinic in Rochester.

Ivor Lewis esophagogastrectomy was performed in 34 patients (63%), transhiatal esophagectomy in 10 (18%), extended Ivor Lewis esophagogastrectomy in 8 (15%), and other in 2.

Follow-up data was obtained from the patient clinical records and a two-part mail survey that was sent to all 46 patients thought to be alive in August 1999.

" All 46 two-part written surveys were returned for a response of 100%. The follow-up was complete in all 54 patients. The median follow-up was 5.3 years.

"At last follow-up, 43 patients (80%) were alive and without evidence of recurrent disease. This included 13 of the 19 patients diagnosed with cancer. Overall 5-year "survival was 86%, which did not significantly differ from an expected survival of 87%."

Dr. Deschamps reported long-term (greater than 2-year) functional outcome available for 48 patients.

Seven patients (13%) were entirely asymptomatic. Ten patients experienced no change in their weight. Thirty-one patients lost a median of 9 kg and seven patients gained a median of 2 kg. Thirty patients had no dysphagia. Mild, moderate and severe incidences of dysphagia were seen in 15, 1, and 2 patients, respectively. Reflux was present in 36 patients. The majority had minimal symptoms with medical management. Dumping was present in eight patients.

Forty-four patients (82%) completed the MOS SF-36 Health Status Questionnaire. "Only seven (13%) of our patients were truly symptom free 2 or more years after esophagectomy. Thirty-eight percent of patients had swallowing difficulties but in only 6% was this moderate to severe. Reflux was present in 68% of our patients. This, however, was well controlled with medication in the majority of patients," Dr. Deschamps said.

"While the functional outcomes were acceptable but less than ideal, esophagectomy had no measurable negative impact on these patients' quality of life," he said. ■

Managing Acute GI Bleeding Without Transfusion Possible

HONOLULU — Management of acute GI bleeding in patients who for religious or personal reasons refuse blood transfusion is a challenge but can be done, with outcomes equal to those in conventionally treated patients, Irfan Nawaz, M.D., said at the annual meeting of the American College of Gastroenterology.

The keys are early endoscopy, close monitoring in the intensive care unit, and support using high-dose erythropoietin and iron, added Dr. Nawaz of the Graduate Hospital, Philadelphia.

The Graduate Hospital has established a program with protocols for bloodless management in patients with acute GI bleeding who refuse blood transfusion. Dr. Nawaz presented a retrospective study comparing outcomes in 105 consecutive patients who presented with acute GI bleeding. Thirty-two refused blood transfusions, and the remaining 73 conventionally managed patients served as controls.

The risk factors for acute GI bleeding were similar, with roughly half of patients in each group having been on NSAIDs or antiplatelet agents. The mean hemoglobin at presentation was 9.3 g/dL in the bloodless management group and 9.8 g/dL in controls.

Time to endoscopy averaged 22 hours in the bloodless management group, compared with 46 hours in conventionally managed controls.

Although total length of hospital stay was similar in the two groups, averaging about 6.8 days, transfusion refusers spent an average of 2 days in the ICU, while controls spent 1.1 day.

All 32 patients in the bloodless management group received iron supplementation, and 25 also received erythropoietin at a mean dose of 465 U/kg, Dr. Nawaz said. One death occurred in each study arm.

—Bruce Jancin