GER and Dental Erosions in Children: True, True, Unrelated?
There has long been a proposed association between gastroesophageal reflux (GER) and dental enamel loss. However, dietary history, drinking habits, and salivary fluid bacteria may be more likely to lead to dental erosions in children. A group of 59 children ages 9 to 17 years with symptomatic GER and 20 control children of similar age underwent 24-hour pH probe testing, blinded dental assessment for erosion, food and oral hygiene questionnaires, measurement of stimulated salivary volume, and quantification of bacteria in the saliva (specifically, *Streptococcus mutans* and *Lactobacillus* species).

There was no significant association of acidic reflux frequency with dental erosion in children with symptomatic GER. Asymptomatic children and children with GER had no significant difference when evaluating for at least one dental erosion. Children with GER had significantly more teeth with erosions especially noted on the posterior teeth compared to the anterior teeth although this difference went away when controlling for food choices (citrus, chocolate, etc.). Dental erosions showed no association with dietary intake, oral intake, age, and gender. Salivary volume and bacterial quantification did not differ between the two groups.

This study provides evidence that pediatric GER may not affect enamel loss although longitudinal studies are needed to see how enamel loss changes over time, especially in relation to diet and oral hygiene.


How Many Colon Biopsies are too Many?
Diagnostic endoscopy in children is increasing in utility throughout the world. Due to different disease processes in the pediatric population compared to adults, intestinal biopsies of normal tissue often are obtained in children due to the possible presence of microscopic disease (eosinophilic infiltration, microscopic colitis, celiac disease, etc.). As a result, large numbers of forcep biopsies are often obtained which can become expensive and problematic as many of these biopsies are often normal.

The authors of this study compared a common colonic 4-region biopsy protocol (rectum/distal sigmoid colon, proximal sigmoid/descending colon, transverse colon, and cecum/ascending colon) used in children with normal-appearing mucosa (nonfocal biopsies) compared to a 2-region biopsy protocol of the right and left colon often used in adult patients. These two protocols were compared in a series of 100 de-identified colonoscopies for either suspected or known intestinal inflammatory disease from a single tertiary, academic medical center for a total of 770 biopsies. Biopsies were considered “class 1” if they demonstrated a definable pathologic diagnosis such as granulomas. Biopsies were considered “class 2” if they did not identify a specific disease process. Minimum standard of care was considered as 2 biopsies for the 2-region protocol and 4 biopsies for the 4-region protocol, and prior obtained biopsies were reviewed randomly.

Using both biopsy protocols, the addition of extra biopsies did not improve the diagnostic value of overall biopsies. In addition, using the 2-region protocol, the addition of one extra biopsy kept the overall diagnostic value of total biopsies effective in only 11.4% of cases, if no other clinical data was available. The 4-region protocol demonstrated that the addition of an extra biopsy kept the overall effectiveness of all biopsies equal in 4.2% of cases, if no other clinical data was available. Interestingly, when additional nonfocal biopsies were obtained, this extra tissue was more informative for the 2-region biopsies as opposed to 4-region biopsies.

This study suggests that less nonfocal biopsies are better than more, using the 2-region biopsy model, which can potentially lead to a reduction of health care costs.


Intrapyloric Injection of Botulinum Toxin A in Children
Intrapyloric injection of botulinum toxin A for treatment of gastroparesis has had mixed results in adult studies. However, younger adults may have a better clinical response to this medication. The authors of this study retrospectively evaluated the clinical outcomes of all children who had received intrapyloric botulinum toxin A for treatment of gastroparesis over a 6-year period at a tertiary children’s hospital.

The standard dose of botulinum toxin A was 6 Units per kilogram for a maximum dose of 100 Units given as a 4-quadrant injection. Gastroparesis was determined by standard measurements using a gastric emptying scan. In total, 47 patients were available for analysis, and most patients had idiopathic gastroparesis. The mean age of patients was 9.98 ± 6.5 years with half of the patients being female. The mean follow up after injection was 17.9 ± 18 months.

Of the total patient group, approximately 33% of patients reported no response to injection while 66% reported at least a mild improvement of symptoms. When patients with clinical improvement were further analyzed, 40% of these patients became asymptomatic over time. The majority of these patients required more than one injection of botulinum toxin A. Univariate analysis for patient age, sex, and cause of gastroparesis (including idiopathic) showed no specific variable predictive of treatment response. However, multivariate analysis demonstrated that an older patient age and vomiting symptoms were significantly predictive of an improved clinical response to an initial intrapyloric injection. Male sex was predictive of response to multiple injections of botulinum toxin A.

These intriguing results obviously require more studies, preferably double-blinded, placebo-based, and prospective. However, this study suggests that a certain subset of pediatric patients may respond well to this therapy for treatment of gastroparesis.


Can Treatment of Infant Feeding Problems be Improved?

Feeding difficulties are a common problem of premature infants and such infants often are referred for consultation by pediatric gastroenterologists. Such patients require extensive work with speech therapy or occupational therapy and can have significant associated health care costs.

The authors of this study evaluated a new method for treatment of premature infant feeding problems. A total of 100 infants in the neonatal intensive care (NICU) (mean of 31 weeks gestation) underwent an innovative approach for their feeding problems at approximately 46.4 ± 13.1 weeks. This approach consisted of an initial evaluation with radiographic imaging such as a videofluoroscopic swallow study, followed by esophageal manometry with associated respiratory inductance plethysmography to assess swallowing physiology. A subsequent feeding plan based on findings from these studies was formulated. This group was compared to 50 historical controls who underwent standard diagnostic techniques, including a fluoroscopic examination as well as occupational and speech therapy evaluation.

The group of infants undergoing the innovative feeding program had an increased feeding success at one year compared to the conventional testing group despite having a significantly smaller birth weight and gestational age. The findings of increased peristaltic reflex frequency with feeding provocation, normal pharyngeal manometry, and a documented sequence of normal suck-swallow-breath-esophageal swallowing was associated with long-term success of oral feeds. A total of 43 of the infants in the innovative feeding group had associated neurologic disease, and 11 of these infants advanced to full oral feeds although the neurologic diseases were too varied to make any statistical determination as to what neurologic diseases are associated with success or failure with oral feeds.

Interestingly, the authors proposed that this new testing technique led to decreased health care costs of $14,000 weekly for each enrolled infant in the NICU, although further studies are needed to demonstrate the feasibility of this new technique in NICUs in multiple locations.


Influenzae, IBD, and Children

Due to the nature of immunosuppression medication used in inflammatory bowel disease (IBD), patients with IBD have an increased risk of serious infections, including influenza. This study evaluated the immunogenic response of the influenza vaccine given to children with IBD.

A children’s hospital in Canada recruited 60 pediatric IBD patients (26 Crohn’s disease, 24 ulcerative
colitis, 10 indeterminate colitis) as well as 53 sibling controls. Children with IBD were separated into two groups, including children on no immunosuppression (such as those receiving antibiotics or aminosalicylates) and children receiving immune suppression medication. Hemagglutination-inhibition titers were obtained prior to immunization as well as 3 to 5 weeks after immunization.

IBD patients had no difference in achieving an immunogenic response to A/Brisbane/10/2007 (H3N2) or A/Brisbane/59/2007 (H1N1) compared to controls, but they did have a significantly lower response rate to B/Florida/4/2006. Additionally, significantly fewer IBD patients using immune suppression medication had a response to B/Florida/4/2006 compared to IBD patients not receiving immune suppression. Prevaccination Pediatric Crohn’s Disease Activity Index scores and Pediatric Ulcerative Colitis Activity Index scores did not change after vaccination.

This study demonstrates the safety of the influenza vaccination in children with IBD; however, the decrease immune response to the B vaccine component could put this patient population at an increased risk of infection, especially if they are being treated with immune suppression medication.


**Hepatitis A Immunization and United States Adolescents**

Hepatitis A virus (HAV) infection often is asymptomatic in children, but mortality from this infection can be quite high in adults older than 50 years of age. The two-dose HAV vaccination has been recommended for children living in high-risk states (defined as infection rates twice the national average) since 1999 and is recommended for all United States children at 12 months of age or older since 2006. The authors of this study used the 2009 National Immunization Survey-Teen (NIS-Teen) to determine HAV vaccination rates for children 13 to 17 years of age. NIS-Teen consisted of national random digit dialing to obtain telephone surveys of parents with children in this age range as well as a mailed survey to vaccination providers identified by these same parents.

In total, 34,976 parents completed the survey and over half of the survey participants had provider vaccination histories. National vaccination rates for HAV were noted to be 42% for one HAV vaccination dose and 29.5% for two HAV vaccination doses. States that recommended the HAV vaccine for children since 1999 had a higher percentage of children with vaccination completion rates (81.3%) compared to states where vaccination was recommended to be considered since 1999 (71.6%) and states where vaccination was recommended since 2006 (58.6%). Percentage of children receiving both the first and second HAV vaccination dose was higher in those states where vaccination had been recommended since 1999. Provider recommendation of the HAV vaccine also was associated with an increased percentage of children getting the HAV vaccine. Poverty statues did not influence the percentage of children receiving the vaccination except in states where the vaccination had only been recommended since 2006.

HAV vaccination rates in children and adolescents need to improve in the United States, and policies to improve vaccination for this disease will prevent significant disease burden for children as they progress to adulthood.

Springer
ISBN: 978-1-4419-1581-8
Price: $299.00

The ASCRS Textbook of Colon and Rectal Surgery fulfills its goal in providing an up to the minute, comprehensive guide to colorectal surgery. It is sponsored by the American Society of Colon and Rectal Surgeons and edited by a group of experts chosen by the ASCRS Executive Committee.

It is primarily written for colorectal trainees and reflects the Association of Program Directors in Colon and Rectal Surgery Core Curriculum. General surgeons with an interest in colorectal surgery as well as established colorectal surgeons will find this text to be essential reading. General surgery residents may find The ASCRS Manual for Residents, a condensed version based on the first edition, more suitable.

This is the second edition; each chapter has been rewritten, to ensure that the most up to date information is included. Additional chapters include: Local Excision of Rectal Cancer and Continuing Medical Education and Quality.

The fifty six chapters are written by ninety eight different authors mostly from North America. They use the current literature and their personal experiences to provide evidence based yet practical and clinically relevant information. There is some overlap between chapters, but this allows each chapter to stand on its own.

The book works its way through anatomy and physiology, perioperative management, benign perianal diseases, anal and presacral tumors, benign colonic diseases, an exceptionally thorough section on all aspects of colon and rectal cancer, pediatric colorectal disorders and finishes with a six chapters covering pertinent health care economics, ethics, legal considerations, education and quality.

Controversial topics are discussed systematically presenting data for both sides of each argument and detailed explanations of why certain recommendations are made.

There are plentiful illustrations, color photographs and radiographic images which are excellent quality but not standardized through the book. The reference section at the end of each chapter provides an excellent starting point for further reading.

In conclusion, this book is an essential resource for both aspiring and established colorectal surgeons that we would highly recommend.

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Vascular Liver Disease: Mechanisms and Management
Editors: Laurie D. DeLeve and Guadalupe Garcia-Tsao
Publisher: Springer, New York Dordrecht Heidelberg London
ISBN:978-1-4419-8326-8
Year: 2011
Price: $219.00
300 pages

The functions of the liver are highly dependent on the vascular connections. These connections not only allow the liver to process and store nutrients but also permit removal of bacteria that come from the gut before they enter into the systemic circulation. It follows that the abnormalities that directly or indirectly affect the hepatic vasculature will lead to significant disease. Although many textbooks have been written on the consequences of the cirrhosis on the liver vasculature this is one of the few books that focuses on liver vasculature as a separate entity.

Although the authors are from 6 different countries the text is well articulated and easily readable. The book is organized in 3 sections. The first section examines the patho-physiology of circulatory diseases. It examines the cellular and biochemical changes of hepatic microcirculation in aging as well as fibrosis and toxic injury. It also discusses general and liver test specific mechanisms involved in hemostasis and thrombosis, Section two provides in-depth information on clinical approaches to vascular liver diseases and section 3 discusses interventional radiology and surgical

(continued on page 54)
approaches to portal hypertension. The chapter on functions of the liver sinusoidal endothelial cell is very nicely written as it gives the author a good description and understanding of the microcirculation in the liver.

The chapter on the circulatory injury in liver transplantation is a bit confusing to the reader. Much information is packed into small paragraphs, and the authors seem to assume that the reader has prior knowledge of liver transplantation. The chapters describing the clinical management of vascular disease give a broad overview but certainly not enough to manage a specific patient that the reader might encounter in their practice. Overall, this is an excellent book for fellows and residents interested in the management of liver diseases.

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Managing the Complications of Cirrhosis: A Practical Approach
Editor: A Zaman MD, MPH
SLACK Incorporated, 2012
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Price: $54.95

Managing the Complications of Cirrhosis: A Practical Approach is a concise review of commonly encountered clinical scenarios in patients with liver disease. The book is nicely divided into ten sections, including preventative health in cirrhosis (important for the primary care provider), nutrition, varices, ascites and renal issues, hepatic encephalopathy, hepatocellular carcinoma (HCC), pulmonary issues, preoperative risk assessment, and timing of referral for liver transplant.

The intended audience is the non-hepatologist. To this end, very detailed discussions of each topic are not undertaken. Rather, the essentials are provided for the benefit of general gastroenterologists, primary care physicians, hospitalists, residents, fellows, nurse practitioners, and physician assistants. The increasing burden of chronic liver disease with modeling studies suggest that cirrhosis may increase by 61%, liver-related complications by 279%, and liver related death by 223% over a 10-year period. It is very important for each of these medical issues to have a concise reference for liver disease. The importance of referral to a hepatologist is emphasized in each chapter in order to prevent patients from progressing to a point where interventions are no longer possible.

One of the most important points to impress upon practitioners was communicated very effectively in this book. The survival rate in symptomatic (late stage) HCC is 10%, whereas when found early, through IR modalities, resection and transplantation, rates of 50%-75% survival are possible. This book encourages not only performing imaging surveillance of high risk patients, but identifying a treatment center that specializes in HCC prior to placing the patient in a surveillance program. The book describes alpha fetoprotein (AFP) as a useful screening and surveillance tool, and we do feel that it has a place in clinical practice. However, it is worth mentioning that the AASLD no longer recommends this test due to its poor operating characteristics. The discussion of variceal screening and primary prophylaxis is excellent, with one exception: it should be mentioned that eradication of varices takes multiple sessions of endoscopy. Many patients are lost to follow-up after one or two procedures and if referring providers are aware of this issue, they can refer back to gastroenterology for repeat band ligation.

In chapter four, an excellent table outlines the endoscopic classification of esophageal and gastric varices, which is very useful for any practitioner reading an endoscopy report who wishes to better understand how to act on the endoscopic findings. Again in this chapter, a 6-month interval for referral for repeat endoscopy is recommended. We recommend repeat band ligation at 2 week intervals until eradicated and then repeat endoscopy at 3-6 months and then every 6 months. This chapter also recommends the use of propranolol or nadolol as the nonselective beta blocker for primary prophylaxis of variceal bleeding. Recent evidence suggests that carvedilol may provide equivalent if not greater reductions in hepatic venous pressure gradients. The risks of beta blockers in patients with refractory ascites must be weighed against the benefits, with particular attention to blood pressure. Recent evidence suggests that beta blockers may increase mortality in this setting. In the management of acute variceal bleeding, the book recommends an infusion of octreotide at 25 micrograms/hour. A dose of 50 micrograms/hour is the recommended and approved
dose in the United States. Although 2 grams/day of intravenous ceftriaxone is recommended in the book for prophylaxis of infections with variceal bleeding, 1 g/day is the data-supported dose. The technique of balloon occluded retrograde transvenous obliteration may be included alongside TIPS and surgery.

The chapter on the management of ascites and renal issues also is very complete and gives specific treatment recommendations that would be very useful for a hospitalist or resident. One comment that we wish to add to the chapter is that patients should not be evaluated for TIPS until their dietary sodium truly has been assessed with a random urine sodium/potassium ratio or 24 hour urine sodium, as excessive intake, sometimes unintentional, is one of the most common causes of a misdiagnosis of refractory ascites. When discussing MELD, the book states that creatinine has the highest weight in the MELD score, when in fact, INR does.

The book gives a nice overview of an oft-overlooked topic: bone disorders in chronic liver disease. We would caution following the recommendation of testosterone supplementation, as it has been associated with HCC formation. The chapter on the management of HCC was very interesting. We would also like to add that Yttrium-90 (Y-90) is another potential treatment modality for HCC.

We particularly enjoyed the chapter on nutrition as it is a topic that is sometimes ignored for what are thought to be more pressing medical problems, when in fact good nutrition can greatly improve outcomes in cirrhotic patients. An important point is made that low protein diets should no longer be recommended as protein does not precipitate encephalopathy; in fact, high protein diets are now recommended.

The text is filled with graphs, charts, and tables that summarize the concepts in the narrative for easy reference. Important points are placed in bold to alert the reader to pay closer attention to them. It easily fits into the pocket of a white coat and can serve as a quick reference in the hospital. The most impressive and useful aspect of the book is the clear indications for specialty referral, which can never be overstated. The goal of the book is not to add new information to the existing body of knowledge, but rather to concisely summarize it for practice. It not only meets, but exceeds this goal in providing a very large amount of information in a clear, easy to understand format that can easily be read and digested in a few hours.

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CORRECTION

We regret an oversight in our article, “A Critical Review of Coffee Consumption and Gallstone Disease” by Arush Singh and Dr. C.S. Pitchumoni that appeared in our November 2011 issue of Practical Gastroenterology. On page 43, the first sentence of the second paragraph of the “Inconclusive Studies” section read: “Another study attempted to analyze why Danish individuals had roughly double the rates of gallstone disease than their nearby northeastern German counterparts.” The correct sentence is: “Another study attempted to analyze why Danish individuals had roughly half the rate of gallstone disease than their nearby northeastern German counterparts.” The Editors
Mauna Kea Technologies Reports New Data Demonstrating Cellvizio(R)’s Potential as a Tool for the Characterization of Pancreatic Cysts

Adding Cellvizio’s AQ-Flex(TM) 19 Confocal Miniprobe Could Improve Care of Patients With Suspected Pancreatic Cancer

PARIS, -- Mauna Kea Technologies (nyse euronext:MKEA), the leader in the endomicroscopy market, today reported new data showing that utilizing Cellvizio, the world’s smallest microscope, during needle-based procedures is safe and may help physicians more accurately differentiate benign and cancerous pancreatic cysts to determine with more certainty if the patient needs immediate surgery.

“Pancreatic cysts are abnormal pockets of fluid on or within the pancreas. While most of these lesions are benign, some pancreatic cysts need to be surgically removed because the risk of harboring or developing a malignancy is high,” said Kenneth J. Chang, Professor and Chief, Division of Gastroenterology and Executive Director of the H.H. Chao Comprehensive Digestive Disease Center at the University of California, Irvine School of Medicine. “Needle-based Confocal Laser Endomicroscopy provides a real time view of the cells inside pancreatic cysts, which may provide physicians with additional information to help them decide if a patient needs surgery. If larger studies confirm these promising early results, we expect this to lead to a significant change in how physicians diagnose and rule out pancreatic cancer.”

Used during endoscopy procedures, this new miniprobe known as the AQ-Flex(TM) 19 is comprised of a fiber-optic microscope that is small enough to thread through a needle with a diameter of 1mm.

Dr. Chang and his colleagues presented the results of the “Diagnosis of Pancreatic Cysts: Endoscopic Ultrasound, Through-the-needle confocal laser Endomicroscopy and Cystoscopy Trial (DETECT)” (abstract L4575) at an American Society of Gastrointestinal Endoscopy (ASGE) Topic Forum at Digestive Disease Week(R) (DDW) 2012, which took place May 19 to 22 in San Diego.

The investigators identified key features seen in Cellvizio images that were taken from inside pancreatic cysts in 21 patients. The investigators then correlated the presence of structures to clinical results and concluded that nCLE procedures improve the sensitivity for the diagnosis of malignant cysts.

Separately, Irving Waxman, MD, Professor of Medicine and Surgery and Director of the Center for Endoscopic Research and Therapeutics at the University of Chicago School of Medicine, presented similar results from a 65-patient, multi-center study known as INSPECT (abstract Mo1204) during an American Gastroenterological Association (AGA) poster session earlier this week.

Investigators were able to identify 100% of the pancreatic cystic neoplasms in these patients. “We are dedicated to developing and rigorously evaluating advanced endoscopic imaging tools that provide physicians with more real-time, cellular-level information than they’ve ever had before,” said Sacha Loiseau, CEO and founder of Mauna Kea Technologies. “The AQ-Flex 19 miniprobe extends Cellvizio’s clinical reach into a new type of organ for the first time and represents a significant milestone for the company.”

Over 40 abstracts and presentations demonstrating the clinical utility of endomicroscopy as a tool to improve outcomes in digestive disease were featured at DDW 2012.

* The nCLE probe has received the European CE (continued on page 58)
(continued from page 56)

Mark and clearance in Israel. The company is working on getting 510(k) clearance in the U.S.

About Pancreatic Cancer
Pancreatic cancer is one of the rare cancers for which chemotherapy and radiotherapy have disappointing results. The best patient outcomes are achieved with surgery in which the surgeon must remove all the cancerous cells, including those in the primary tumor, as well as those hidden in the surrounding pancreatic tissue and lymph nodes. The American Cancer Society (ACS) estimates that approximately 43,920 people (22,090 men and 21,830 women) will be diagnosed with pancreatic cancer this year and about 37,390 people (18,850 men and 18,540 women) will die of the disease. Since 2004, rates of pancreatic cancer have continued to steadily increase by 1.5% each year, according to the ACS.

About Digestive Disease Week
Digestive Disease Week (DDW) is the largest international gathering of physicians, researchers and academics in the fields of gastroenterology, hepatology, endoscopy and gastrointestinal surgery. DDW is jointly sponsored by the American Association for the Study of Liver Diseases, the American Gastroenterological Association (AGA) Institute, the American Society for Gastrointestinal Endoscopy and the Society for Surgery of the Alimentary Tract. The meeting showcases approximately 5,000 abstracts and hundreds of lectures on the latest advances in GI research, medicine and technology. For more information, visit: www.ddw.org

About Mauna Kea Technologies
Mauna Kea Technologies is a global medical device company and leader in the endomicroscopy market. The company researches, develops and markets innovative tools to visualize and help detect abnormalities in the gastro-intestinal and pulmonary tracts. Its flagship product, Cellvizio(R), a probe-based Confocal Laser Endomicroscopy (pCLE) system, provides physicians and researchers high-resolution cellular views of tissue inside the body. Large, international, multi-center clinical trials have demonstrated Cellvizio’s ability to help physicians more accurately detect early forms of disease and make treatment decisions immediately. Designed to improve patient outcomes and reduce costs within a hospital, Cellvizio can be used with almost any endoscope. Cellvizio has 510(k) clearance from the U.S. Food and Drug Administration and the European CE-Mark for use in the GI and pulmonary tracts.

For more information about Mauna Kea Technologies, go to: www.maunakeatech.com


Image Available:
http://www2.marketwire.com/mw/frame_mw?attachid=1990665

Product Release: Revital-Ox™ Family of Endoscopy Cleaning Solutions
The Revital-Ox™ one-stop shop of oxidative chemistry-based solutions provides an effective, efficient and environmentally thoughtful approach to cleaning valuable endoscopic equipment.

The Revital-Ox system addresses all aspects of the endoscope cleaning process, from pre-cleaning and transport through cleaning and high-level disinfecting. It includes eight products: Revital-Ox 2X Concentrate Enzymatic Detergent, Enzymatic Sponges, D-Sponge, Bedside Complete, and Endoscopy Brushes; Revital-Ox Resert® XL HLD High Level Disinfectant, and the Revital-Ox rigid and flexible container systems. Revital-Ox Resert XL HLD High Level Disinfectant is an oxidative chemistry, not an aldehyde. It achieves microbial efficacy in eight (8) minutes at 20° C and requires only one rinse cycle. This 2% Accelerated Hydrogen Peroxide formula is made with biodegradable ingredients and does not require special detoxification or deactivation processes. The chemistry has no irritating odor, and requires no heating or special ventilation.

For more information, visit:

(continued on page 60)
New Data Show That Avantis Medical Systems’ Third Eye(R) Retroscope(R) Device Significantly Increases Adenoma Detection Rate in Patients at Higher Risk for Colorectal Cancer

Studies Presented at Digestive Disease Week(R) 2012 Confirm That Third Eye Retroscope Helps Address Limitations of Standard Colonoscopy, Including Missed Adenomas

SUNNYVALE, CA, -- Avantis Medical Systems, Inc., a technology leader in developing novel catheter-mounted digital imaging devices, today announced a new study confirming that use of the Third Eye(R) Retroscope(R) device during colonoscopy procedures significantly increases detection of adenomas (pre-cancerous polyps). The data were presented during the Digestive Disease Week(R) 2012 conference (DDW) taking place in San Diego from May 19-22.

The study, “Improved Adenoma Detection Rate during Colonoscopy with Use of a Retrograde-Viewing Auxiliary Imaging Device (Sa1602),” concluded that colonoscopes augmented by the Third Eye Retroscope device allowed detection of significantly more adenomas than the same colonoscopes used alone and that the benefit from “Third Eye colonoscopy” was even greater for above-average risk patients. The results of this randomized, controlled trial were reported in a poster presentation by Peter D. Siersema, MD, PhD, Director of the Department of Gastroenterology and Hepatology of the University Medical Center Utrecht, the Netherlands.

The authors performed post-hoc subset analyses of data from the previously-published Third Eye Retroscope Randomized Clinical Evaluation (TERRACE) study. While their overall results had shown detection of 23.2% additional adenomas with the retrograde-viewing device, they found that the reason for performing the colonoscopy procedure appeared to affect the degree to which use of the auxiliary device improved adenoma detection.

In patients who were returning for “surveillance” procedures because they previously had adenomas removed, Third Eye colonoscopy detected 35.7% additional adenomas that had been missed with the same colonoscope used alone. In patients undergoing “diagnostic” procedures because they had worrisome symptoms or an abnormal result on another screening test, use of the device allowed detection of 55.4% additional adenomas. Combining the results for the surveillance and diagnostic groups (i.e., the “non-screening” patients who are considered to have above-average risk of developing colorectal cancer) Third Eye colonoscopy detected 40.7% additional adenomas compared to standard colonoscopy.

Physicians are most concerned about missing large adenomas -- those measuring at least 1 cm in diameter -- because they are the ones that are most likely to transform into colorectal cancer. The study showed an 11.8% overall miss rate for large adenomas with standard colonoscopy, while no large adenomas were missed during Third Eye colonoscopy.

The authors also looked specifically at the impact on clinical management for the patients with above-average risk. In those patients, detection of adenomas during Third Eye colonoscopy that had been missed during standard colonoscopy resulted in 17.5% additional patients being found to have at least 1 adenoma and 27.3% additional patients being advised to return for surveillance in 3 years based on criteria listed in current guidelines.

“These results confirm that the Third Eye Retroscope is very useful for finding additional adenomas during colonoscopy, and the reduced miss rate for large adenomas is especially important,” said Dr. Siersema. “By substantially enhancing the sensitivity of our examinations, use of the retrograde-viewing device will allow us to improve the clinical management of our patients. Especially for those who have increased risk for colorectal cancer, we can more accurately determine who should return for close surveillance and who can safely be examined at longer intervals.”

Rick Randall, CEO of Avantis Medical Systems, added, “Regardless of their level of risk, patients who are informed about the Third Eye Retroscope device
have expressed a great deal of interest in it. Patients who are undergoing surveillance are acutely aware of their increased risk for colorectal cancer and the possible consequences of missing large adenomas. In the light of this new evidence, we anticipate that surveillance patients will be highly motivated to have their physicians use the device during their next colonoscopy procedures.”

About Digestive Disease Week (DDW)
DDW is the largest international gathering of physicians, researchers and academics in the fields of gastroenterology, hepatology, endoscopy and gastrointestinal surgery. Jointly sponsored by the American Association for the Study of Liver Diseases, the American Gastroenterological Association (AGA) Institute, the American Society for Gastrointestinal Endoscopy, and the Society for Surgery of the Alimentary Tract, DDW takes place May 19 - 22, 2012, at the San Diego Convention Center. The meeting showcases more than 5,000 abstracts and hundreds of lectures on the latest advances in GI research, medicine and technology.

For more information, visit: www.ddw.org

About Colorectal Cancer and Colonoscopy
Colorectal cancer is the second-leading cause of cancer-related deaths in the United States, and according to the American Cancer Society, about 150,000 people in the U.S. are diagnosed with colorectal cancer each year. Screening and surveillance allow colorectal cancers to be found earlier, when the disease is easier to cure, and cancers can be prevented if adenomas are removed before they become malignant. Colonoscopy is widely-recognized as the “gold standard” for examination of the colon, but there are limitations to the procedure, and numerous studies have shown adenoma miss rates of 21-24 percent.

About the Third Eye Retroscope and Avantis Medical Systems, Inc.
Avantis Medical Systems, Inc. markets the Third Eye Retroscope, an FDA-cleared, disposable, catheter-based camera indicated for use with a standard colonoscope to provide an additional view of the colon for diagnostic purposes. It is inserted through the instrument channel of a standard colonoscope to provide the physician with a retrograde (backward) view of the lining of the colon simultaneously with the forward view of a standard colonoscope. This retrograde view allows physicians to see more of the colon and can reveal lesions that are hidden behind folds. Clinical evidence shows that two-thirds of adenomas missed during colonoscopy are located behind these folds in the wall of the colon, where they are often unseen in the forward view of the colonoscope, even during the most meticulous examinations.

The Third Eye Retroscope device is commercially available in the United States and reimbursed by Medicare. For more information, visit: www.AvantisMedical.com or www.ThirdEyeColonoscopy.com

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MEETINGS CALENDAR

September 21 & 22, 2012
2012 Annual Probiotic Symposium Optimizing GI Health: Probiotics, Prebiotics, & Nutritive Factors
Hotel Solamar, San Diego, CA. Attend the sixth Annual Probiotic Symposium for a unique opportunity to learn about holistic integration of probiotics, prebiotics, and other nutritive factors to clinically manage gastrointestinal dysfunction. Approved for a maximum of 11 AMA PRA Category 1 Credits™ Save $100—Register before August 31, 2012 www.ProbioticSymposium.com 866-216-6127 info@ProbioticSymposium.com Hotel Reservation: 877-230-0300 Group rate code: Probiotic Symposium 2012

September 30-October 4, 2012
The 2012 Clinical Congress of the American College of Surgeons (ACS)—one of the largest international meetings of surgeons in the world—will convene in Chicago, Ill. The Chicago Hilton and Towers will serve as the headquarters hotel for the meeting, and the McCormick Place Convention Center will house the scientific panel sessions and courses, as well as all scientific and technical exhibits. This year’s Clinical Congress will feature an outstanding educational program and the launch of the College’s year-long Centennial celebration. The program features special lectures, exhibits, and receptions to commemorate the Centennial in addition to guest lectures by prominent leaders in surgery; panel sessions in theme- and discipline-based tracks; dozens of video-based education selections; a selection of didactic postgraduate courses and hands-on skills courses; leading-edge, research-in-progress papers in all surgical specialties for presentation during the Surgical Forum and Papers Sessions; daily town-hall meetings and “Meet the Expert Luncheons;” a series of press conferences; and over 300 posters displaying innovative scientific research. Additionally, more than 200 companies will display products or services that improve the quality of surgical patient care or enhance management practices within the surgical profession. Registration will open in early June. Additional program information can be viewed online at: www.facs.org/clincon2012/

October 19-24, 2012 ACG 2012
American College of Gastroenterology Annual Meeting and Postgraduate Course
Las Vegas, NV. Excellent faculty and a clinical focus make the ACG Annual Scientific Meeting and Postgraduate Course the premier GI clinical event of the year. Network with your peers, share experiences from your practice, and get unparalleled access to faculty for in-depth discussions on a broad range of cutting edge topics for the GI physician. The ACG Annual Scientific Meeting offers the latest clinical information on key topics for the GI physician. Register online at: www.acgmeetings.gi.org/registration.asp
ACROSS
1 Commonly known as acid reflux disease, abbr.
2 Skin disease
3 Uncontrolled growth
4 Relating to a duplicate
5 ___ track
6 One kind of surgery
8 Dosage amount, for short
9 Over 30 indicates obesity
11 Lung disease
14 America
16 Medical expertise related to childbirth, for short
17 SI unit of energy absorbed from ionizing radiation
21 Imaging technique
22 Flavonoid
24 Addressed
27 Magazine manager
28 Operation (abbr.)
29 _____ puncture
30 Means inside at the beginning of a word
32 Imaging technique
33 It’s part of all drug trials
35 Lay down so as to accumulate
37 Long
38 Waste from an organism
40 Channels
43 Act
45 One type of cancer screening test
46 Superbowl score
49 Hospital area, for short

DOWN
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2 Skin disease
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(Answers on page 43)