Ulcerative Colitis in Australia: Is IBD in Children Increasing?

Previous studies have suggested that inflammatory bowel disease (IBD) incidence is increasing worldwide, and in particular, the incidence of ulcerative colitis (UC) in Victoria, Australia is one of the highest in the world. The authors of this study evaluated the incidence of pediatric UC from 1950 to 2009.

Pediatric UC was determined from ICD coding, medical records prior to use of ICD coding, individual files kept by physicians, endoscopy lists, and the Australian pediatric and adolescent IBD database. The diagnosis of UC was made by standard criteria. In total, 1310 children with UC (16 years of age or less) were diagnosed during this study period. The median duration of symptoms prior to UC diagnosis was 16 weeks, and both weight and height z-scores were significantly less than the general pediatric population. It was noted that 66% of pediatric UC patients had extensive colitis while 25% had left-sided colitis and 9% had proctitis.

Patients were then divided into three study groups consisting of the periods of 1950-1969, 1970-1989, and 1990-2009; additionally, the first 40 years of data were compared to the last 20 years of data. Over the duration of the study period, the incidence of pediatric UC increased 11-fold (from 0.15 per 100,000 children to 1.61 per 100,000 children). The mean age at diagnosis significantly increased while the duration of symptoms before diagnosis significantly decreased during the study period. Laboratory testing for inflammatory markers was not significantly different throughout the study except for a significantly elevated platelet count noted in the last 20 years of the study. The methods for UC diagnosis had expectedly changed over this 60-year study period. Barium enema and rigid sigmoidoscopy were the most common diagnostic tools for UC diagnosis prior to 1980 although colonoscopy was the predominant diagnostic method after 1989. Extensive colonic involvement was noted in the later time periods as was concomitant liver disease.

This study provides further evidence that pediatric IBD, specifically pediatric UC, is becoming more common over time. Extensive colonic disease is now a more frequent presentation although diagnostic techniques, such as flexible colonoscopy, are currently commonplace and may explain these findings. Regardless, the incidence of pediatric UC is increasing, and its presentation appears to be changing suggesting a need to identify genetic and environmental factors.

Functional Abdominal Pain and Behavioral Therapy

Functional abdominal pain (FAP) is a common cause of referral to pediatric gastroenterologists, and treatment for this disorder is limited. The authors of this study evaluated the effectiveness of social learning and cognitive behavioral therapy (SLCBT) one year after intervention for FAP treatment. These same authors have published prior data showing improvement of FAP symptoms 6 months after SLCBT intervention.

The study utilized 200 parent-child FAP dyads which were placed in a randomized controlled trial from clinics in 2 regions of North America. FAP in children was defined as 3 or more episodes of recurrent abdominal pain during a 3-month period, and clinical assessments were obtained at baseline, 1 week, 3 months, 6 months, and 12 months. Dyads were separated into two groups. One group consisted of three one-hour weekly SLCBT sessions with trained therapists which entailed using therapy dealing with abdominal pain in relation to maladaptive beliefs in relation to abdominal pain. The other group received education and support (ES) which simply provided information regarding the gastrointestinal system and nutrition and served as a control. Several measurements were made during this study including the Faces Pain Scale – Revised and Children’s Somatization Inventory (completed by both parents and children), the Functional Disability Inventory, the Adults’ Responses to Children’s Symptoms, the Pain Beliefs Questionnaire completed by parents, and the Pain Response Inventory completed by children.

The mean age for children in this study was 11.2 years. Demographics between the SLCBT and ES groups did not differ significantly. Parents in the SLCBT group reported significantly greater reductions in their children’s pain at 6 and 12 months compared to the ES group. Functional disability decreased from baseline.
to 12 months in both treatment groups, and children in both treatment groups reported less gastrointestinal symptoms after intervention although the children in the SLCBT had significantly greater improvement. Parents in the SLCBT group reported greater reductions in solicitousness (anxiousness) in their children compared to parents in the ES group at 12 months with significantly greater reductions in the perceived threat of a child’s pain. The children in the SLCBT group also had improved coping skills to minimize pain compared to the ES group.

The study demonstrates the benefits of SLCBT in treatment of pediatric FAP. SLCBT is a relatively low cost intervention for a common pediatric gastrointestinal somatic complaint, and this study raises the question as to if pediatric mental health specialists should be part of pediatric gastrointestinal clinic care.


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John Pohl, M.D., Book Editor, is on the Editorial Board of Practical Gastroenterology
Antibiotic Treatment in Patients in Septic Shock with Cirrhosis

A nested cohort study within a large retrospective database of septic shock from 28 medical centers in Canada, the United States and Saudi Arabia was carried out by the Cooperative Antimicrobial Therapy of Septic Shock Database Research Group between 1996 and 2008. The impact of initial empiric antimicrobial therapy was examined. Among 635 patients with cirrhosis and septic shock, the hospital mortality was 75.6%. Inappropriate initial empiric antimicrobial therapy was administered in 155 (24.4%) of patients. The median time to appropriate antimicrobial administration was 7.3 hours. The use of inappropriate initial antimicrobials was associated with increased mortality (OR 9.5), as was the delay in appropriate antimicrobials. Among patients with eligible bacterial septic shock, a single, rather than two or more appropriate antimicrobials was used in 226 (72.9%) patients and was also associated with higher mortality (OR 1.8). These findings were consistent across various clinical relevant subgroups.

It was concluded that in patients with cirrhosis and septic shock, inappropriate and delayed appropriate initial empiric antimicrobial therapy is associated with increased mortality. Monotherapy of bacterial septic shock is also associated with increased mortality. The process of selection and implementation of empiric antimicrobial therapy in this high-risk group should be restructured.


One Year Mortality in Patients with Hypoxic Hepatitis and Jaundice

This study was aimed to evaluate the incidence and clinical effect of jaundice in critically ill patients with hypoxic hepatitis (HH). A total of 206 consecutive patients with same were screened for the development of jaundice during the course of HH. Individuals with preexisting jaundice or liver cirrhosis at the time of admission (N=31), were excluded from analysis. Jaundice was diagnosed in patients with plasma total bilirubin levels greater than 3 mg/dL.

One-year survival infections, cardiopulmonary, GI, renal, and hepatic complications were prospectively documented. New onset of jaundice occurred in 63 of 175 patients with HH (36%). In patients who survived the acute effects of HH, median duration of jaundice was 6 days. Patients who developed jaundice (group 1), needed vasopressor treatment, renal replacement therapy, and mechanical ventilation more often and had a higher maximal administered dose of norepinephrine, compared with patients without jaundice (group 2).

One year survival rate was significantly lower in group 1, compared with group 2 (8% vs. 25% respectively). Occurrence of jaundice was associated with increased frequency of complications during follow-up (54% in group 1 vs. 35% in group 2). In particular, infections as well as renal and GI complications occurred more frequently in group 1 during followup.

It was concluded that jaundice is a common finding during the course of HH and leads to increased rate of complications and worse outcome in patients with HH.


Adequacy of Colon Polyp Resection

To determine the rate of incompletely resected neoplastic polyps in clinical practice, a prospective study on 1427 patients who underwent colonoscopy at two medical centers and had at least one nonpedunculated polyp (5 to 20 mm), was carried out. After polyp removal was considered complete macroscopically, biopsies were obtained from the resection margin. The main outcome was a percentage of incompletely resected neoplastic polyps (incomplete resection rate – IRR) determined by the presence of neoplastic tissue in post polypectomy biopsies.

Associations between IRR and polyp size, morphology, histology, and endoscopists were assessed by regression analysis.

Of 346 neoplastic polyps removed by 11 gastroenterologists, 10.1% were incompletely resected. IRR increased with polyp size and was significantly higher for large (10 to 20 mm) than small (5 to 9 mm) neoplastic polyps (7.3% vs. 6.8%), and for sessile, serrated adenomatous polyps than for conventional adenomas (31% vs. 7.2%). The IRR for endoscopists with at least 20 polypectomies ranged from 6.5 to
22.7%. There was a 3.5-fold difference between the highest and lowest IRR after adjusting for size and sessile serrated histology.

It was concluded that neoplastic polyps are often incompletely resected, and the rate of incomplete resection varies broadly among endoscopists. Incomplete resection might contribute to development of colon cancers after colonoscopy (interval cancers). Efforts are needed to ensure complete resection, especially of larger lesions.


**Congenital Hepatic Fibrosis in Autosomal Recessive Polycystic Kidney Disease**

To describe congenital hepatic fibrosis in patients with autosomal recessive polycystic kidney disease (ARPKD), confirmed by detection of mutations in PKHD1, patients with a combination were evaluated at NIH from 2003 to 2009, analyzing clinical, molecular, and imaging data from 73 patients (age 1 to 56 years), with kidney and liver involvement.

Initial symptoms were liver-related in 26% of patients and others presented with kidney disease. One patient underwent liver and kidney transplantation, and 10 others received kidney transplants. Four presented with cholangitis and one with variceal bleeding. A total of 69% of patients had enlarged left lobes on MRI, 92% had increased liver echogenicity on ultrasonography, and 65% had splenomegaly which started early in life. A total of 60% of children younger than 5 years had enlarged spleens.

Spleen volume had an inverse correlation with platelet count and prothrombin time, but not with serum albumin level. Platelet count was the best predictor of spleen volume, and spleen length corrected for patient’s height correlated inversely with platelet count.

Spleen volume did not correlate with renal function or type of PKHD1 mutation. A total of 22 of 31 patients who underwent endoscopy were found to have varices. Five had variceal bleeding and two had portosystemic shunts; 40% had Caroli syndrome and 30% had an isolated dilated common bile duct.

It was concluded that platelet count is the best predictor of the severity of portal hypertension, which has an early onset, but is underdiagnosed in patients with ARPKD and 70% of patients with ARPKD have biliary abnormalities. Kidney and liver disease are independent and variability in severity is not explainable by the type of PKHD1 mutation.


**Tenofovir in Chronic Hepatitis B in Adolescents**

To evaluate the safety and efficacy of tenofovir DF in adolescents with chronic hepatitis B (CHB), a double-blind, placebo-controlled trial was carried out on adolescents 12 to less than 18 years of age. It was randomized to 52 patients with 54 patients receiving placebo once daily for 72 weeks. The primary endpoint was virologic response (HBV DNA less than 400 copies per ml at week 72). A total of 106 patients were enrolled, 101 patients completed 72 weeks of treatment.

At baseline, 91% of patients were hepatitis Be antigen-positive and 85% had prior exposure to HBV therapy. A virologic response was observed in 89% (46/52) of patients who received tenofovir DF and 0 of 54 patients who received placebo. Treatment response was not affected by prior HBV treatment and no resistance to tenofovir DF developed through week 72. Among patients with an ALT level greater than upper limits of normal at baseline, normalization of ALT occurred in 74% of patients receiving tenofovir DF and 31% of patients receiving placebo.

Grade 3/4 adverse events were higher among patients treated with placebo (24%) than patients treated with tenofovir DF (10%). No patients met the safety endpoint of a 6% decrease in spine bone mineral density at week 72.

It was concluded that tenofovir DF therapy in HBV-infected adolescents was well tolerated and highly effective at suppressing HBV DNA and normalizing ALT values in both treatment-naive adolescents and those with prior exposure to HBV therapy.


Murray H. Cohen, D.O., “From the Literature” Editor, is on the Editorial Board of Practical Gastroenterology.
BEVERLY HILLS DOCTORS HOST SCOPEFEST 2013
FOR COLON CANCER AWARENESS

BEVERLY HILLS, CA. March, 2013 — In honor of Colorectal Cancer Awareness Month, fourteen doctors and nurses from La Peer Health Systems underwent colonoscopies as part of Scopefest, an event designed to boost awareness about colon cancer and lessen anxiety surrounding the screening process.

“Many people hesitate to schedule this life-saving procedure because they fear the preparation process,” said Dr. Ari Nowain, a gastroenterologist at La Peer and one of the two surgeons who performed colonoscopies on his colleagues. “The goal of Scopefest was to allow our doctors to practice what they preach, while showing people that a colonoscopy isn’t as bad as they might think.”

In an effort to lighten the mood about this dreaded exam, La Peer made Scopefest into a fun-spirited event lasting all weekend. The night before the doctors and nurses underwent screening, they attended a bowel preparation cocktail party at the Montage Hotel. An anesthesiologist, who doubles as a mixologist, created signature cocktails combining the standard Suprep bowel preparation drink with sparkling lemonade and other clear beverages.

“A good prep allows for a more effective procedure by letting your gastroenterologist and colorectal surgeon identify even the smallest polyp, and even the smallest polyp can be significant,” said Liza Capiendo, MD, a surgeon in La Peer’s Department of General and Colorectal Surgery and one of the doctors who underwent a colonoscopy at the event.

Colonoscopies are diagnostic exams in which doctors utilize a flexible tube known as a colonoscope to view the lining of the rectum and intestine and detect polyps. By removing these potentially pre-cancerous tumors early, surgeons can often prevent colon cancer from developing. Scopefest also featured screenings using the revolutionary new Third Eye® colonoscopy procedure, which provides doctors with a retrograde (“backward”) view of the colon. According to clinical trials, the Third Eye® colonoscopy aids in the detection of pre-cancerous polyps hidden behind the folds and turns of the colon.

All fourteen doctors and nurses underwent colonoscopies on Saturday, March 9th at La Peer Health Systems’ outpatient surgical facility in Beverly Hills. Following the screenings, everyone involved in Scopefest attended a dinner and awards presentation at Via Alloro. Participants received light-hearted awards such as Best Prep, Biggest Polyp and Most Curvaceous Colon. Various media organizations and outlets, including My Fox LA, covered the event.

“Overall, Scopefest 2013 was a huge success,” said Dr. Siamak Tabib, a gastroenterologist at La Peer and one of the doctors who administered the exams. “Not only did the event help lighten the mood about bowel preparation, but it also provided patients with valuable information about when to undergo screening.”

According to Dr. Tabib, patients should begin undergoing regular colonoscopies at age 50. Those with a family history of colon cancer should begin screenings at age 40 or 10 years before the relative was diagnosed. For those experiencing symptoms of colon cancer, it’s important to undergo an evaluation right away. Patients interested in scheduling a colonoscopy can contact La Peer at 310.360.9119.

“Having a colonoscopy is the best way both to prevent colon cancer and detect existing cases early, when treatments are more effective,” said Dr. Tabib.

La Peer Health Systems is an outpatient surgery center in Beverly Hills, founded by doctors and focused on providing excellent patient care alongside the most cutting-edge medical treatments available. With 47 world-renowned physicians in 13 specialties, we offer comprehensive medical treatment that takes patients from consultation to diagnosis, treatment, surgery, and ultimately aftercare. Our 13 medical departments include orthopedics & sports medicine, gastroenterology, head & neck surgery, colorectal & general surgery,
MEDICAL BULLETIN BOARD

MINIMALLY INVASIVE SURGERY FOR COLORECTAL CANCER YIELDS OPTIMAL OUTCOMES FOR PATIENTS

SAGES Shares Patient Information Guidelines as Part of National Colorectal Cancer Awareness Month

LOS ANGELES, CA. March, 2013 – Colon and rectal cancer together comprise the nation’s second-leading cause of cancer deaths. Every year, about 140,000 Americans are diagnosed with colon or rectal cancer and more than 50,000 people die from it. Fortunately, the death rate from this disease has steadily been decreasing for the last 20 years due to preventative screening and more sophisticated surgical approaches. One of these approaches is minimally invasive surgery. Minimally invasive laparoscopic colorectal surgery allows surgeons to perform many common colon and rectal procedures through small incisions. Depending on the type of procedure, patients may leave the hospital in a few days and return to normal activities more quickly than patients recovering from open surgery. The Society of American Gastrointestinal and Endoscopic Surgeons (SAGES) has issued “Patient Information Guidelines for Colonoscopy” for those focusing on prevention, and “Patient Information Guidelines for Laparoscopic Colon Resection” for those undergoing cancer treatment, highlighting the advantages of minimally invasive procedures and other pertinent information.

“Early screening is key to prevention, and it is worth remembering that colorectal cancer is the only one of the five most common cancers that can actually be prevented by screening – i.e. by removing colorectal polyps before they can turn into cancer. However when patients have to make a decision about treatment, they should be aware that minimally invasive operations are an option in many cases, as easier recovery can often be achieved through minimally invasive surgery (MIS),” said Dr. Scott Melvin, SAGES President and Professor and Chief of Gastrointestinal Surgery and Professor at Ohio State University. “We want patients to know that under the right circumstances, choosing laparoscopic surgery will allow for a more comfortable recovery than an open procedure would and due to briefer recovery times, when necessary, chemotherapy treatment may take place sooner rather than later,” Dr. Melvin said.

Dr. Tonia Young-Fadok, Professor of Surgery at the Mayo Clinic College of Medicine and Chair of SAGES Humanitarian task force added, “Through guidelines such as these SAGES is committed to encouraging patients to be more informed about the options available to them. Patients should feel comfortable asking their surgeon if a minimally invasive procedure is an option, and if not they may wish to seek a second opinion from a surgeon experienced with these operations.”

Guidelines are available at the links above or also at: www.sages.org/publications/patient_information SAGES has been at the forefront of best practices in colorectal cancer surgery by researching, developing and disseminating the guidelines and training for standards of practice in surgical procedures. SAGES 2013 annual conference will be held this year April 17th-20th in Baltimore, Maryland.

About SAGES

The mission of the Society of American Gastrointestinal and Endoscopic Surgeons (SAGES) is to improve quality patient care through education, research, innovation and leadership, principally in gastrointestinal and endoscopic surgery. SAGES is a leading surgical society, representing a worldwide community of over 6,000 surgeons that can bring minimal access surgery, endoscopy and emerging techniques to patients worldwide. The organization sets the clinical and educational guidelines on standards of practice in various procedures, critical to enhancing patient safety and health. For more information, visit: www.sages.org

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THIRD EYE RETROSCOPE TO BE EXHIBITED AT DIGESTIVE DISEASE WEEK (DDW 2013) IN ORLANDO

SUNNYVALE, CA, April 12, 2013 – Avantis Medical Systems, Inc., manufacturer of the Third Eye Retroscope, is again participating in Digestive Disease Week (DDW), which will be held May 18-21, 2013 in Orlando, FL.

This year’s focus will be on the extensive clinical data showing that use of the Third Eye Retroscope can substantially enhance the quality of colonoscopy by improving the ability to view areas behind folds in the wall of the colon.

Colonoscopy is generally considered the best available method for detecting and removing adenomas and other lesions in the colon. However, due to limitations of the technology, even careful colonoscopy exams by experienced endoscopists can miss approximately 21-24% of adenomas and 12% of large adenomas, those measuring at least 1 cm in diameter. These large adenomas are considered the most dangerous, as they are estimated to transform into adenocarcinoma at a rate of 2-5% per year, depending on the age of the patient.

Adenomas are especially likely to be missed if they are located behind folds, where they are hidden from the forward-viewing colonoscope. The Third Eye Retroscope provides a second, retrograde (backward) video image that allows endoscopists to see the areas behind folds and flexures.

Multiple studies of the Retroscope have demonstrated improved adenoma detection rates. The largest and most recent was “TERRACE,” a randomized, controlled trial that provided a head-to-head comparison with standard colonoscopy. Each subject underwent two complete colonoscopies, one with and one without use of a Retroscope. The net additional adenoma detection rate for Third Eye colonoscopy was 23.2% for all subjects and 40.7% for subjects with higher risk for colorectal cancer – those having colonoscopy for surveillance or diagnostic workup.

The investigators also looked at miss rates for large adenomas, which were 11.8% for standard colonoscopy and 0.0% for Third Eye colonoscopy. Details of this and other studies are available at: http://avantis.thirdeyecolonoscopy.com/clinical-results

The Third Eye Retroscope is the only available device that can safely and effectively provide a retrograde view throughout the length of the colon. The device is used in conjunction with a standard colonoscope, and is compatible with systems manufactured by Olympus, Fujinon and Pentax.

In support of colorectal cancer awareness activities, the Third Eye Retroscope was recently featured on the Emmy Award-winning daytime series “The Doctors” in a special segment called “Headline News Affecting Your Health Right Now.” The episode, which aired on National Colorectal Screening Day (March 8), highlighted Third Eye colonoscopy as a significant improvement to standard colonoscopy and can be viewed at: http://www.thedoctorstv.com/videolib/init/8769

About the Third Eye Retroscope and Avantis Medical Systems, Inc.

Avantis Medical Systems, Inc., a technology leader in developing novel catheter-mounted digital imaging devices, markets the Third Eye Retroscope, an FDA-cleared, disposable, catheter-based camera that is inserted through the instrument channel of a standard colonoscope to provide a retrograde (backward) view simultaneously with the forward view of the colonoscope.

Clinical evidence shows that two-thirds of the adenomas that are missed during colonoscopy are located behind 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 retrograde view provided by the Third Eye Retroscope allows physicians to see more of the colon and can reveal lesions that are hidden behind folds.

For more information, visit:

www.ThirdEyeColonoscopy.com
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Huntington Beach Resort & Spa, Huntington Beach, CA – The American Neurogastroenterology and Motility Society (ANMS) invites you to participate in its 17th Neurogastroenterology & Motility Scientific Meeting, 8th Postgraduate Course on Gastrointestinal Motility & Neurogastroenterology in Clinical Practice and Young Investigator Forum.

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ACROSS
1. The C in PBC
6. Endoscopy classification used in gastroenterological studies
9. Result, medically
10. Series of treatments, for example
11. Many many years
12. Liquid quantity
13. Vitamin B3
14. Decompose
15. Neatly
18. ___rotonin
19. Colder
22. Major operation
24. Natural Killer Gene Complex, for short
25. ___operative
26. Group of individuals sharing a common characteristic and observed over time as a group
27. Methanethiosulfonate, for short
28. Actigall is a brand of it
31. Pancreas, e.g.
34. Drug used to prevent bowel movements
37. Hosp. test
38. Acid prefix
40. Soak (up)
42. Increased production of this occurs in many adenocarcinomas
43. Malignant growths
48. Tiny sac in the lungs

DOWN
1. Condition in which little or no bile is secreted or the flow of bile into the digestive tract is obstructed
2. Quercetin-3-O-rutinoside, it has been studied in relation to hemorrhoid treatment
3. Bone at the base of the tongue
4. Any of a group of natural steroid alcohols
5. Bursae
6. Skin irritation in the rectal area
7. Organ removal
8. Somatostatin, for short
9. Result, medically
10. Series of treatments, for example
11. Many many years
12. Liquid quantity
13. Vitamin B3
14. Decompose
15. Neatly
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19. Colder
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