



## Gastroenterologists Take on Statewide Problem



For years, the two pediatric gastroenterologists at the University of Virginia Children's Hospital have treated hundreds of children throughout Virginia with Crohn's disease and ulcerative colitis. A chronic and potentially debilitating condition, Crohn's disease is characterized by ulcerations and inflammatory lesions throughout the gastrointestinal tract. Along with ulcerative colitis, it is the leading form of inflammatory bowel disease (IBD).

The large number of patients at UVA did not seem unusual until a patient's mother asked Stephen M. Borowitz, M.D., a simple but surprising question. She inquired if Borowitz was aware that he was treating two other boys with Crohn's disease who lived on the same street as her family. Borowitz indicated that he hadn't realized that. The boy's mother then said that she knew of at least three other boys in her son's class being treated for Crohn's at UVA as well.

### ROLE OF ENDEMIC FACTORS IN IBD PREVALENCE

Borowitz was intrigued by the observation. So he analyzed the addresses of several hundred children and adolescents suffering from IBD that he and James L. Sutphen, M.D., Ph.D., head of the Division of Pediatric Gastroenterology and Nutrition at UVA Children's Hospital, cared for in their practice.

Borowitz found significant clusters of children and adolescents with Crohn's disease in the Shenandoah Valley and the Lynchburg area. In one Lynchburg ZIP code, the preva-



Stephen M. Borowitz, M.D., and James L. Sutphen, M.D., Ph.D., head of the Division of Pediatric Gastroenterology and Nutrition at UVA Children's Hospital

lence was 10 to 20 times greater than the usual published rate. He discovered that most patients lacked a family history of Crohn's. In addition, the subdivision where the subset lived was built in former pasture land and was surrounded by dairy farms. Myco-bacterium avium subspecies paratuberculosis infection, or MAP (John's disease), is very similar to Crohn's disease and common in Virginia cattle.

"The question became: Are we seeing a little epidemic of Crohn's disease?" says Borowitz. "It's likely that in some people, Crohn's is caused by a chronic low-grade infection with something like MAP or is possibly triggered by an endemic infection."

The Centers for Disease Control and the Virginia Department of Health are planning studies to learn more. "We hope to develop a protocol to look at some of the known Crohn's disease susceptibility genes in our patient

population," Borowitz says, "as well as some careful environmental and epidemiological surveys."

### COMPREHENSIVE APPROACH TO GASTROENTEROLOGIC DISORDERS

In addition to children who suffer from IBD, Sutphen and Borowitz treat celiac sprue disease, liver disorders and a wide variety of gastroenterologic ailments. Sutphen credits some outside-the-box treatments and strong interactions with other arms of the Health System for his division's ability to treat a large number of patients effectively.

"We have the advantage of partnering with an active large-magnet adult gastroenterology division, colorectal surgery department and pediatric surgery department," Sutphen says. "The surgical and internal medicine expertise is a big plus for our patients."

Targeted medication regimens along with diet and lifestyle modifications form the core of most IBD treatment programs. Salicylate

## Transplant Technique Changes Children's Lives



With an innovative approach to liver transplants, the UVA Children's Hospital is providing life-saving relief for children with biliary atresia. The living donor transplant procedure is being used to combat this congenital defect that interferes with bile drainage from the liver, as well as other forms of severe neonatal liver disease.

Living donor transplantation involves replacing a child's diseased liver with the left lobe of a parent's or other compatible donor's functioning liver – eliminating the need to wait for a cadaveric liver to become available.

The Division of Transplant Surgery routinely performs the procedure in adults and is now having success with children and even infants. "Our patients are getting younger and younger – we're now doing transplants in children less than one year of age," said pediatric gastroenterologist James Sutphen, M.D., Ph.D. "The living donor transplants we've done in the past year are doing very well."

For more information on pediatric liver transplantation at UVA, call 800-552-3723.

medications such as mesalamine and antimetabolites including azathioprine are mainstays for Crohn's and ulcerative colitis, a condition characterized by inflammation of the colon's inner lining.

The highly intimate nature of IBD symptoms – including abdominal pain, diarrhea, weight loss and fatigue – and its prevalence in adolescents and pre-adolescents make positive support systems crucial. From its website, the Division of Pediatric Gastroenterology maintains online tutorials and an interactive email section. The division is also designing an online support group for patients. These elements will largely be administered by division clinicians Shelly Garrison, R.N., and Elizabeth Bradley, R.N.

"If you have a question, you can email us and the nurses will respond within two working days," Sutphen says. "We maintain a heavy presence on the internet."

As the department grows, Sutphen and Borowitz plan to emphasize a multifaceted approach that caters to patients and their families. Stressing the unique support system at UVA, Borowitz says, "I think the quality of our care has improved over time. It's much more holistic and focused more on our patients' quality of life than specific medical outcomes."

For a consultation or to refer a patient to UVA Children's Hospital's Division of Gastroenterology and Nutrition, call 800-552-3723.

## UVA HEALTH SYSTEM

### CONTINUING MEDICAL EDUCATION

#### Spring-Summer 2006 Conferences

All conferences offered in Charlottesville, Va., unless otherwise noted.

- ▶ **VEST UROLOGY CONFERENCE**  
Lithotripter Auditorium  
UVA Medical Center, March 23-25
- ▶ **RUNNING MEDICINE 2006: HEALTH AND HUMAN PERFORMANCE**  
Darden Conference Center  
University of Virginia, March 31-April 1
- ▶ **41ST ANNUAL SWINEFORD ALLERGY CONFERENCE**  
Jordan Hall Conference Center  
UVA Medical Center, April 7-8
- ▶ **26TH ANNUAL MCLEMORE BIRDSONG PEDIATRIC CONFERENCE**  
The Homestead  
Hot Springs, Va., April 21-23
- ▶ **6TH ANNUAL ARTHRITIS AND ARTHROPLASTY COURSE**  
Hyatt Regency  
Minneapolis, Minn., May 11-13
- ▶ **30TH ANNUAL FITZ-HUGH SYMPOSIUM**  
Jordan Hall Conference Center  
UVA Medical Center, June 9-10

For more information, call 434-924-5310 or visit [www.cmevillage.com](http://www.cmevillage.com).

**Accreditation:** The UVA School of Medicine is accredited by the Accreditation Council for Continuing Medical Education. Specific information about the designated number of AMA Category 1 credits for conferences can be obtained by calling 434-924-5310.