To the relief and hope of those who suffer from and treat inflammatory bowel disease (IBD), a number of new biologic drugs are in the pipeline for controlling the disease. (Biologics are manufactured in, extracted from, or semisynthesized from biological sources, and are usually large, complex, typically protein molecules.) Indeed, one new agent, vedolizumab (Entyvio), recently became available for use against IBD, and others soon will be approved. Biologics such as tumor necrosis factor (TNF) alpha inhibitors help patients who have failed other medical therapies. A significant portion of IBD patients have now switched to vedolizumab, which works via a specially designed immunologic mechanism of action.

“Ulcerative colitis [UC] and Crohn’s disease result from a complex interplay of genetic, environmental and immune-mediated factors,” said Lourdes gastroenterologist Andrew Conn, MD, MS, FACP, an expert on IBD treatment. Many traditional IBD drugs, such as anti-inflammatories, immune modulators and steroids have broad action, may have significant side effects and do not maintain remission.

GI Tract-Specific Design Reduces Side Effects

In IBD, a discrete subset of memory T cells home in on the GI tract and express the surface protein \( \alpha_4\beta_7 \) integrin, which binds to mucosal addressin cell-adhesion molecule-1 (MAdCAM-1, expressed on endothelial cells of gut capillaries). This binding mediates entry of the T lymphocytes into the gut, setting up an inflammatory process. Vedolizumab is a monoclonal antibody that binds the \( \alpha_4\beta_7 \) integrin receptor, preventing the T cells from crossing the endothelium of inflamed intestinal tissue (see image below).

“Entyvio is for patients with moderate-to-severe IBD who have failed at least one other conventional or biologic therapy,” explained Dr. Conn, who has gained more than 20 years of specialization in this area after completing his GI fellowship at The Hospital of the University of Pennsylvania. The drug is indicated for individuals who have had an unsuccessful course with a TNF blocker such as Remicade, or immunomodulators or corticosteroids.

After a series of loading doses, ongoing Entyvio therapy is by a 30-minute infusion every eight weeks. Patients must have up-to-date vaccinations. The treatment is not officially approved for patients under age of 18. As a drug designed to be digestive-tract specific, Entyvio has shown virtually none of the potentially serious side effects associated with TNF alpha inhibitors.

“This new agent selectively binds a marker on white cells imprinted to gut tissue. It will replace use of natalizumab (Tysabri), a previous adhesion molecule that similarly homes to the gut but also to the brain—sometimes resulting in catastrophic brain damage. And for select patients, especially those with UC who refuse to expose themselves to the side effects of a TNF blocker, proceeding directly to treatment with Entyvio is a possibility. Combination therapies are also appropriate,” said Dr. Conn, who has been honored as a “Top Doc” in southern New Jersey.

Dr. Conn: “We can’t afford to wait until IBD damage is significant. We must prevent long-term complications.”

Knowledgeable Long-Term Management Essential

Despite the potential for extended remissions, IBD is considered a lifelong disease. IBD patients considering pregnancy also need to consult with an IBD specialist and a high-risk obstetrician.

“Even though patients learn what works for them, compliance is an issue because they may feel good for long periods. And so a strong physician-patient relationship is important,” noted Dr. Conn, who is known for his IBD presentations to the medical and consumer community and serves as a trustee of the Philadelphia Chapter of the Crohn’s and Colitis Foundation of America. He hosts a CCFA educational and support group for Camden County and the surrounding communities on the first Tuesday of each month at Lourdes Medical Associates, 500 Grove Street, Haddon Heights, NJ.

For more information, visit www.lourdesnet.org
Fatty Liver Disease on the Rise; Risk for Liver Failure

Today, as much as a quarter of the U.S. population may have non-alcoholic fatty liver disease (NAFLD). For most people, there are no signs or complications. However, NAFLD is one of the fastest growing liver problems in the country, due primarily to the obesity epidemic. The disease is contributing increasingly to the annual incidence of liver cirrhosis and cancer.

“Most literature predicts that, within the next 20 years, NAFLD will surpass viral hepatitis as the leading cause of liver failure,” said Lourdes gastroenterologist Robert J. Shmuts, DO. “This will put increasing pressure on the availability of liver transplantation. But this is a preventable problem that can be identified and addressed.”

Most NAFLD patients who develop symptoms are overweight and have metabolic syndrome, but others can have normal BMI and no other risk factors. The condition is typically discovered incidentally as a result of blood work or imaging. “However, some patients have normal enzyme levels and may need additional tests, including ultrasound initially, followed by CT imaging. Liver biopsy is the only way to fully confirm the extent of NAFLD,” said Dr. Shmuts.

Care is primarily through weight loss. Vitamin E is also used in non-diabetic patients. In addition, anti-diabetic medications are under study for the treatment of NAFLD. Specialists also focus on managing common co-morbidities of obesity, such as hypertension, high cholesterol and problems in blood sugar control.

For more information, visit www.lourdesnet.org or call 1-888-LOURDES (1-888-568-7337).

Quick reminders on GI-related care from Lourdes’ gastroenterology physicians:

- Patients on daily PPI need supplemental calcium and vitamin D, and yearly electrolyte checks to ensure no electrolyte imbalances.

- The American College of Gastroenterology recommends first colonoscopy for African Americans by age 45. For any patient with a primary relative who has had colon cancer, first colonoscopy should be 10 years before that relative’s age of diagnosis or age 40, whichever comes first.

- All patients in the Baby Boom generation should get tested for hepatitis C at least once.