

## Mucosal Healing and Sustained Clinical Remission in Early-Stage Crohn's Disease

In the February issue of *Gastroenterology*, researchers from various institutions in Belgium and The Netherlands evaluated the use of complete healing (based upon endoscopy) as a predictor of better outcomes in Crohn's disease. The patient population consisted of 133 Crohn's disease patients who were newly diagnosed and treatment-naïve and who were administered either a combination of immunosuppressive therapy (azathioprine) and 3 infusions of infliximab or treatment with conventional corticosteroids. The azathioprine arm received repeated infliximab doses for relapses, and the corticosteroid arm received azathioprine if there was corticosteroid dependency and infliximab only if azathioprine failed. After 2 years of therapy, a representative subset of 49 patients from the initially randomized cohort underwent ileocolonoscopy. The researchers performed correlation analysis between clinical parameters, including endoscopic activity (Simple Endoscopic Score), and clinical outcome 2 years following endoscopic examination. The researchers also recorded data from 46 patients 3 and 4 years after the start of therapy. Complete mucosal healing was defined as a simple endoscopic score of 0 after 2 years of treatment and was the only factor that predicted sustained, steroid-free remission 3 and 4 years after the initiation of treatment. This was seen in 17 of 24 patients (70.8%), in contrast to the 6 of 22 patients who had lesions detected by endoscopy (27.3%, Simple Endoscopic Score >0) ( $P=.036$ ; odds ratio=4.352; 95% confidence interval, 1.10–17.220). Among patients with mucosal healing at 2 years, 15 of 17 maintained remission without further infliximab infusions during years 3 and 4 ( $P=.032$ ; odds ratio=4.883; 95% confidence interval, 1.144–20.844). The researchers concluded that complete mucosal healing in early-stage Crohn's disease is associated with significantly higher steroid-free remission after 4 years of therapy.

## Liver Stiffness and Fibrosis Progression in Hepatitis C After Liver Transplantation

According to the January issue of *Hepatology*, researchers at the Hospital Clínic in Barcelona, Spain assessed whether repeated liver stiffness measurements (LSM) post–liver transplantation (LT) can be used to differentiate slow from rapid fibrosers (fibrosis stage F2–F4 at 1 year after LT). The patient population consisted of 84 LT recipients infected with hepatitis C virus (HCV) and 19 LT control patients who were HCV-negative. At 3, 6, 9, and 12 months post-LT, all patients underwent LSM. Liver biopsies were obtained from all HCV-positive patients 12 months post-LT (paired

hepatic venous pressure gradient [HVPG] measurements in 74). Thirty-one patients (37%) were classified as rapid fibrosers. At 6, 9, and 12 months, rapid fibrosers had a significantly higher median LSM (9.9 kPa, 9.5 kPa, 12.1 kPa) than slow fibrosers (6.9 kPa, 7.5 kPa, 6.6 kPa) ( $P<.01$  all time points). Rapid fibrosers also had a significantly greater slope of liver stiffness progression (kPa  $\times$  month; 0.42) than slow fibrosers (0.05;  $P<.001$ ), suggesting two different speeds of liver fibrosis progression. Patients with HVPG of 6 mmHg or higher or HVPG lower than 6 mmHg at 1 year post-LT had nearly identical figures. According to multivariate analysis, donor age, bilirubin level, and LSM were identified as independent predictors of fibrosis progression and portal hypertension in the estimation group ( $n=50$ ) and validated in a second group ( $n=34$ ). The areas under the receiver operating characteristic curve that identified rapid fibrosers and patients with portal hypertension as early as 6 months post-LT were 0.83 and 0.87, respectively, in the estimation group and 0.75 and 0.80, respectively, in the validation group. The researchers concluded that early and repeated LSM following HCV recurrence, in combination with clinical variables, can differentiate rapid from slow fibrosers post-LT.

## Computed Tomography Colonography for Colorectal Cancer Screening in the Elderly

Researchers at the University of Wisconsin School of Medicine and Public Health in Madison, Wisconsin retrospectively examined computed tomography (CT) colonography and program outcome measures in an older cohort (65–79 years;  $n=577$ ) of an established large-scale colorectal cancer screening program ( $n=5,176$ ). The results were published in the February issue of *Radiology*. With a 6-mm threshold for positivity, the overall referral rate to optical colonoscopy was 15.3% (88/577), leading to 277 polypectomies and the removal of 103 nondiminutive adenomas. For adenomas, per-patient positivity rates at the 6- and 10-mm thresholds were 10.9% (63/577) and 6.8% (39/577), respectively. The prevalence of advanced neoplasia was 7.6% (44/577). Fifty-four adenomas were classified as advanced, and 5 unsuspected cancers were identified. The advanced neoplasias detected were usually large (mean size, 21 mm). Extracolonic findings that were potentially important were found in 15.4% (89/577) of patients, at a work-up rate of 7.8% (45/577). Vascular aneurysms ( $n=18$ ) comprised the majority of important extracolonic diagnoses, and no major complications were encountered. The authors concluded that CT colonography is safe and effective for screening older patients.