

Treatment of Cirrhosis and Variceal Bleeding With Early Use of Transjugular Intrahepatic Portosystemic Shunts

According to a June issue of *The New England Journal of Medicine*, researchers at the University of Barcelona in Barcelona, Spain conducted a study of 63 patients with cirrhosis and acute variceal bleeding who had received vasoactive drugs and endoscopic therapy. Within 1 day of admission, these patients underwent random assignment to 1 of 2 treatment groups: the early-transjugular intrahepatic portosystemic shunt (TIPS) group (n=32), which consisted of the placement of a polytetrafluoroethylene-covered stent within 72 hours of randomization; or the pharmacotherapy-endoscopic band ligation (EBL) group (n=31), which consisted of additional vasoactive drugs, followed after 3–5 days by propranolol or nadolol, long-term EBL, and, if needed, TIPS as rescue therapy.

Fourteen patients in the pharmacotherapy-EBL group experienced rebleeding or the inability to control bleeding compared to 1 patient in the early-TIPS group ($P=.001$) during the follow-up period, which lasted a median of 16 months. According to the researchers, the 1-year actuarial probability of remaining free of this composite endpoint was 50% in the pharmacotherapy-EBL group compared to 97% in the early-TIPS group ($P<.001$). Twelve patients in the pharmacotherapy-EBL group and 4 patients in the early-TIPS group died ($P=.01$). The pharmacotherapy-EBL group reported a 1-year actuarial survival rate of 61% compared to 86% in the early-TIPS group ($P<.001$). In the pharmacotherapy-EBL group, 7 patients required TIPS for rescue therapy, though 4 of them died.

Evaluation of Low-Volume Polyethylene Glycol Versus Single- or Split-Dose Polyethylene Glycol for Morning Colonoscopy

Researchers at the Sungkyunkwan University School of Medicine in Seoul, Korea evaluated the efficacy and tolerability of a split-dose magnesium citrate low-volume (2 liters) polyethylene glycol (PEG) regimen for morning colonoscopy. In this study, the results of which were published in the June issue of *The American Journal of Gastroenterology*, 232 patients underwent random assignment to 1 of 3 groups: 4 liters of PEG (day before procedure; group 1, n=79); 2 liters of PEG (day before procedure) and then 2 more liters of PEG (day of procedure; group 2,

n=80); or magnesium citrate (250 mL, day before procedure) and then 2 liters of PEG (day of procedure; group 3, n=73).

According to the researchers, group 3 noted satisfactory bowel preparation more frequently than group 1 (75% vs 51%; $P=.001$), at a rate similar to that of group 2 (75% vs 76%; $P=.896$). As for overall satisfaction, a significantly larger proportion of patients in group 3 gave a grade of “satisfactory” compared to group 1 (43% vs 23%; $P=.010$); this proportion was similar to that of group 2 (43% vs 35%; $P=.133$). As for willingness to repeat the same preparation, if necessary, group 3 was more willing to do so than group 1 (93% vs 48%; $P<.001$) or group 2 (93% vs 62%; $P<.001$).

Approval of Hepatitis C Virus Antibodies Test

The US Food and Drug Administration recently approved the first rapid blood test (OraQuick, OraSure Technologies) to detect hepatitis C virus (HCV) antibodies in venous whole blood specimens of individuals 15 years and older. The test, which takes approximately 20 minutes and is performed on a test strip, can be used in individuals at risk for HCV infection or in symptomatic individuals; it is not approved for screening of the general population.

Outcomes of Laparoscopy in Diverticular Disease

Researchers at the University of Wisconsin School of Medicine and Public Health in Madison, Wisconsin analyzed data from the National Surgical Quality Initiative Program, a large, prospective, multicenter database, to evaluate the use of laparoscopy compared to open surgery in the elective treatment of diverticular disease. The results of this analysis, which consisted of 6,970 patients who had elective surgeries for diverticular disease from 2005 to 2008, were published in the June issue of *Gastroenterology*. In total, 3,468 patients comprised the open surgery group and 3,502 patients comprised the laparoscopy group. After adjusting for the probability of morbidity, American Society of Anesthesiology class, and ostomy creation, the researchers noted that patients who received laparoscopic procedures had a significantly lower incidence of overall complications (including superficial surgical site infections, deep incisional surgical site infections, sepsis, and septic shock) compared to patients who underwent open operations.

Early De Novo Cancer in Liver Graft Recipients Treated With Cyclosporine

According to the July issue of *Liver Transplantation*, researchers at Erasmus MC University Medical Centre in Rotterdam, The Netherlands conducted a study to assess the risk factors for de novo cancer following liver transplantation (LTx) in 385 patients who had a transplant between 1986 and 2007. According to retrospective analyses, de novo malignancy developed in 50 (13.0%) patients. At 1, 5, 10, and 15 years after LTx, the cumulative incidence of de novo cancer was found to be $2.9\% \pm 0.9\%$, $10.5\% \pm 1.8\%$, $19.4\% \pm 3.0\%$, and $33.6\% \pm 6.8\%$, respectively. Compared to the general population, the standardized incidence ratio of malignancy in LTx patients was 2.2 (95% confidence interval, 1.6–2.8). After several exclusions (ie, post-transplant lymphoproliferative disorder and skin cancer), there was a significantly lower survival rate in patients with de novo cancer compared to cancer-free patients. Univariate risk factors for de novo cancer consisted of cyclosporine A (CsA), time period of LTx, and recipient age. According to multivariate analysis, the only independent risk factor for de novo cancer was CsA treatment. Surprisingly, CsA treatment was found to enhance cancer risk in patients who received LTx after 2004, when C(2) monitoring was introduced. These patients also had a significantly lower acute rejection rate, possibly reflecting a more robust immunosuppressive status due to the CsA-C(2) regimen. After considering age, only patients ≤ 50 years had a higher cancer rate when treated with CsA compared to tacrolimus.

In Brief

A prospective cross-sectional study of asymptomatic patients presenting for colorectal cancer screening in a university hospital endoscopy center found that smoking was associated with flat adenomas in that population. The researchers noted that these findings may explain the earlier onset of colorectal cancer in smokers as well as the advanced stage with which they present, compared to nonsmokers. They also noted that smokers may require screening with high-definition colonoscopes to detect flat adenomas. *Gastrointest Endosc.* 2010;71:1234-1240.

Researchers of a randomized, placebo-controlled, double-blinded trial noted that, although pentoxifylline does not decrease short-term mortality in patients with advanced cirrhosis, it does reduce the risk of complications. *Gastroenterology.* 2010;138:1755-1762.

According to a retrospective review of patients with cirrhosis who underwent abdominal surgery, the preoperative albumin level in patients with Model for End-Stage Liver Disease scores ≥ 15 correlates with outcome and could guide operative decisions. Intraoperative packed red blood cell transfusion correlates with adverse outcome and should be limited. *Clin Gastroenterol Hepatol.* 2010;8:451-457.