GLOSSARY

TNF-α
Tumor necrosis factor-α

TNF-R1 AND TNF-R2
TNF receptors

F2 OR F3
Enlarged, tortuous varices or largest-sized, coil-shaped varices (according to the classification of Beppu *et al.*)

IBD
Inflammatory bowel disease

TNF-α, TNF-R1, TNF-R2, interleukin-6, -8 and -10, NOx, MDA and ammonia. Values were compared to those obtained from eight healthy volunteers.

Surprisingly, there was no significant change in mean arterial pressure or renal function in either group, although there was rapid improvement of encephalopathy in the MARS group. Plasma cytokines, MDA and ammonia were elevated in both patient groups but did not change significantly during the study period, suggesting that these factors are independent of clinical changes seen in MARS treatment. NOx, again elevated in both groups at baseline, reduced significantly in the MARS group only and so may play a role in MARS.

Sen *et al.* suggest that the use of MARS should be restricted until more consistent clinical data are available.

Original article Sen S *et al.* (2004) Pathophysiological effects of albumin dialysis in acute-on-chronic liver failure: a randomized controlled study. *Liver Transpl* **10:** 1109–1119

β-blockers delay variceal growth and bleeding

Esophageal varices, resulting from portal hypertension, are a significant complication of liver cirrhosis. As varices become larger, there is increased risk of rupture with upper gastrointestinal bleeding. Since this risk is reduced by treatment with β-blockers, Merkel *et al.* have evaluated nadolol in the prophylaxis of growth of small varices.

Patients with cirrhosis and small esophageal varices were randomized to nadolol ($n = 83$) or placebo ($n = 78$) in a multicenter, single-blind study. Mean follow-up was 36 months and the primary endpoint was the occurrence of large esophageal varices.

Growth of esophageal varices to F2 OR F3 was observed in 9 patients in the nadolol group compared with 29 in the placebo group ($P < 0.001$; absolute risk difference 31%; 95% confidence interval [CI] 17%–45%). Taking into account possible confounding factors (such as age and center), treatment was a significant predictor of growth of varices. Variceal bleeding, a secondary endpoint, was significantly less frequent in the nadolol group than in the placebo group ($P = 0.02$; absolute risk difference 10%; 95% CI 4.3%–15.7%). Once large varices had developed, however, the risk of bleeding was similar irrespective of treatment, suggesting that the observed benefit of nadolol treatment was related to the delay in progression to large varices.

Merkel *et al*. conclude by suggesting that β-blocker prophylaxis of esophageal variceal bleeding should be started at the stage of small varices.

Original article Merkel C *et al.* (2004) A placebo-controlled clinical trial of nadolol in the prophylaxis of growth of small esophageal varices in cirrhosis. *Gastroenterology* **127:** 476–484

Upper gastrointestinal endoscopy in pediatric IBD

Prompted by retrospective studies suggesting that upper gastrointestinal (UGI) endoscopy may have a role in the diagnosis of pediatric IBD, Castellaneta *et al.* have carried out the first prospective study to address this question.

Children with suspected IBD ($n = 65$) were consecutively enrolled and examined by ileo-colonoscopy. Those with distal proctosigmoiditis—suggestive of ulcerative colitis—were excluded. The remainder ($n = 54$) were examined by UGI endoscopy with multiple biopsies, and had a barium meal and follow-through. Histological specimens were scored by a single pathologist and children were defined as having Crohn's disease, ulcerative colitis or indeterminate colitis.

Of the 54 children examined by UGI endoscopy, 23 (43%) were diagnosed with Crohn's disease on ileo-colonoscopy whereas 18 (33%) were diagnosed with ulcerative colitis. Of the 13 (24%) children whose diagnosis was ambiguous following ileo-colonoscopy, 11 were diagnosed with Crohn's disease on UGI endoscopy and the remaining 2 patients were diagnosed with indeterminate colitis. Endoscopic lesions were found in 26% of patients with no UGI symptoms, and conversely, 33% of symptomatic patients had no endoscopic or histological abnormality.

Since UGI endoscopy contributed to the diagnosis of 11 (20%) of children in this series, the authors suggest that this approach should be applied to all children with sus-