## Myocardial injury predicts poor outcome in patients with acute liver failure

Elevated troponin I levels, indicative of cardiac muscle damage, are found in some patients with sepsis or acute stroke. Heart problems sometimes occur in patients with acute liver failure (ALF), but whether cardiac damage is a common occurrence in these patients is unknown. To shed some light on the matter, Parekh *et al.* investigated the prevalence of elevated troponin I levels in patients with ALF for the Acute Liver Failure Study Group.

The study population comprised 187 patients from the US ALF registry. Serum troponin I levels indicative of myocardial injury (defined as a troponin I level >0.1 ng/ml) were found in 138 participants (74%). Increasing troponin I levels correlated with advanced hepatic coma, death, and death after transplant. For those with elevated troponin I levels, the odds ratios for advanced coma and death were 3.88 and 4.69, respectively. Three weeks after enrollment, 34.4% of those with elevated troponin I levels had died, compared with 10.2% of those with normal levels. Troponin I levels also correlated positively with APACHE II scores, and negatively with glomerular filtration rate.

The author conclude that, although the mechanism of cardiac injury in patients with ALF remains unknown, subclinical cardiac damage could have a considerable negative impact on the outcome for patients with ALF. Troponin I might be useful both as a marker of cardiac injury and as a predictor of outcome.

**Original article** Parekh NK *et al.* (2007) Elevated troponin I levels in acute liver failure: is myocardial injury an integral part of acute liver failure? *Hepatology* **45:** 1489–1495

## Colorectal cancer and dysplasia are endoscopically visible in ulcerative colitis patients

Interpretation of systematic random biopsies of colonic mucosa is the leading approach for identifying dysplasia and colorectal cancer (CRC) in patients with IBD; however, the accuracy of this approach is limited by the small mucosal surface area sampled and by variation in the interpretation of pathology.

To determine whether endoscopy can visualize CRC and dysplasia in ulcerative colitis patients and, therefore, allow targeted biopsies to be taken, Rubin *et al.* retrospectively analyzed reports from 1,339 endoscopies performed in 622 patients diagnosed with ulcerative colitis and compared them with the corresponding pathology reports. The endoscopic procedures involved standard technology and both random and targeted biopsies of lesions were taken.

A total of 75 neoplastic lesions were identified on the basis of pathological examination of biopsies but only 46 were visible during endoscopy, the remainder were 'invisible' (i.e. were not described as suspicious by the endoscopist but were identified as neoplastic by the pathologist). The overall endoscopic sensitivities for neoplasia per-patient and per-lesion were 76.1% and 61.3% respectively. Per-patient endoscopic visibilities for dysplasia and CRC were 71.8% and 100% respectively.

The authors acknowledge that there was no quality assurance for biopsy sampling, endoscopic procedural variation or variation in endoscopist's experience. They suggest that their findings, which challenge the traditional dogma of 'invisible dysplasia' in ulcerative colitis, might result from the increasing optical resolution of colonoscopes. They conclude that endoscopically targeted biopsies complement random biopsies and should be included in future practice guidelines.

**Original article** Rubin DT *et al.* (2007) Are dysplasia and colorectal cancer endoscopically visible in patients with ulcerative colitis? *Gastrointest Endosc* **65:** 998–1004

## Livers from brain-dead donors are initially worse than those from living donors

Livers from living donors have better graft function and survival than those from brain dead donors. Evidence from experimental animal models suggests that brain death in the donor provokes inflammatory changes and a period of ischemia that is detrimental to donor organs and that can negatively affect transplant outcome. To provide clinical data to support these experimental results, Weiss *et al.* compared the immunological status of livers from human brain dead and living donors and, furthermore, assessed the impact of any differences on organ function following transplantation.

Liver biopsy specimens were collected from all livers (brain dead [$n=32$] and living donors