## **RESEARCH HIGHLIGHTS**

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The analysis favored the use of colonoscopy, which was less expensive and more effective than watchful waiting, or flexible sigmoidoscopy followed by air-contrast barium enema. Although flexible sigmoidoscopy was the least expensive test, the incremental cost-effectiveness ratio for colonoscopy was only \$5,480 per quality-adjusted year of life saved. Surprisingly, colonoscopy was even more cost-effective in patients aged 40–49 years than in the basecase scenario.

In the absence of data from prospective clinical trials, say the authors, the current study supports the use of early invasive strategies for the evaluation of adults presenting with rectal bleeding.

**Original article** Allen E *et al.* (2005) The evaluation of rectal bleeding in adults: a cost-effectiveness analysis comparing four diagnostic strategies. *J Gen Intern Med* **20:** 81–90

## Managing depression in patients receiving interferon

There is evidence that interferon therapy can cause depression. A recent Italian study has investigated this problem in patients receiving interferon and ribavirin for the treatment of chronic hepatitis C.

Scalori and colleagues used the Minnesota Multiphasic Personality Inventory (MMPI) to assess 185 patients prior to therapy and after 3 months of treatment. Using the MMPI depression scale, patients were categorized as 'normal' (score <60/100) or 'abnormal' (score >60/100). Those in the abnormal category underwent further psychiatric assessment and were treated for depression if necessary.

A total of 18 patients (10%) had positive MMPI tests before therapy and were judged to be at risk of depression; 16 of these patients developed a psychiatric disorder. Of 31 patients (17%) who developed a psychiatric disorder after starting therapy, 11 required antidepressant drugs. When carried out at baseline, the positive and negative predictive values of the MMPI for predicting depression were 0.89 and 0.91, respectively. These values increased to 0.91 and 0.93 when the assessment was repeated after 3 months of interferon therapy.

Scalori *et al.* recommend that all patients should undergo psychiatric evaluation before starting interferon therapy, and that any cases of depression should be addressed by aggressive treatment.

**Original article** Scalori A *et al.* (2005) Interferon-induced depression: prevalence and management. *Dig Liver Dis* **37**: 102–107

## Cellular immune depression in chronic liver failure

Patients with liver cirrhosis are at increased risk of infections, and there is evidence that depression of cellular immunity is responsible. Wasmuth and colleagues have investigated this by analyzing functional immune parameters in patients with acute liver failure and decompensated cirrhosis (acute-on-chronic liver failure [ACLF]), using patients with severe sepsis, or with nondecompensated cirrhosis, as controls.

At the time of admission to the medical intensive care unit, the degree of cellular immune depression was similar in patients with ACLF (n=27) and severe sepsis (n=31); patients in these groups had significantly lower monocyte surface HLA-DR expression and ex vivo lipopolysaccharide-induced tumour necrosis factor (TNF)- $\alpha$  production than those with stable liver cirrhosis (n = 24). Serum levels of interleukin-6, however, were significantly higher in patients with sepsis than in those with ACLF, suggesting that different mechanisms were responsible for the immune depression seen in the two groups. A subgroup analysis showed that the etiology of liver cirrhosis was not related to the observed immune dysfunction in the ACLF group.

Wasmuth *et al.* conclude that patients with ACLF displayed a 'sepsis-like' cellular immune depression. They propose that immune-enhancing therapies should be developed to reduce infectious morbidity in these patients.

**Original article** Wasmuth HE *et al.* (2005) Patients with acute on chronic liver failure display 'sepsis-like' immune paralysis. *J Hepatol* **42**: 195–201

## Noninvasive ventilation following pediatric liver transplantation

Noninvasive ventilation can eliminate the need for endotracheal intubation in adult recipients of solid-organ transplants, but it is not known