

## Leukocytapheresis shows promise for treatment of refractory IBD

Preliminary studies suggested that selective removal of circulating granulocytes and monocytes, with the Adacolumn® (Japan Immunoresearch Laboratories, Takasaki, Japan) apheresis system, could ameliorate IBD symptoms. Two pilot studies undertaken in seven US centers have now provided fresh evidence that this treatment is safe and effective in patients with moderate-to-severe, treatment-refractory IBD. Sands *et al.* say that Adacolumn® leukocytapheresis could become a useful adjunct therapy for patients with IBD who cannot tolerate or who do not respond to conventional pharmacotherapy.

Each study enrolled 15 patients, with either ulcerative colitis or Crohn's disease, respectively. All patients had active, moderate-to-severe disease of  $\geq 3$  months duration that had not responded to conventional medications; seven patients with Crohn's disease had previously undergone surgery. Patients were scheduled to undergo five 60 min Adacolumn® sessions at weekly intervals, and were followed up in weeks 7, 12, and 16. In all, 11 of 15 patients with ulcerative colitis and 14 of 15 patients with Crohn's disease received five Adacolumn® treatments. At week 7, five patients with ulcerative colitis and nine with Crohn's disease had responded, with clinically meaningful reductions in disease activity. Six of these nine Crohn's disease patients entered remission. There were no serious treatment-related adverse effects.

The authors note that good venous access is essential for successful Adacolumn® treatment, and conclude that adequate training of apheresis operators is a key factor. Larger, sham-treatment-controlled trials are ongoing.

**Original article** Sands BE *et al.* (2006) Pilot feasibility studies of leukocytapheresis with the Adacolumn apheresis system in patients with active ulcerative colitis or Crohn disease. *J Clin Gastroenterol* 40: 482–489

## Perioperative chemotherapy prolongs survival in resectable gastric cancer

It has long been known that chemotherapy prolongs survival of patients with inoperable gastric cancer. A new, multinational study has

now shown that perioperative chemotherapy can prolong survival of patients with surgically resected gastric cancer, compared with patients treated with surgery alone. Benefits of perioperative chemotherapy might, however, depend on the regime chosen.

Cunningham *et al.* randomly allocated patients diagnosed with resectable gastric, gastroesophageal junction, or lower-esophageal adenocarcinoma to undergo either surgery alone ( $n=253$ ), or surgery plus three preoperative and three postoperative cycles of chemotherapy ( $n=250$ ). Chemotherapy cycles comprised 50 mg/m<sup>2</sup> epirubicin and 60 mg/m<sup>2</sup> cisplatin on day 1, with continuous infusion of fluorouracil 200 mg/m<sup>2</sup> daily for 21 days. Dose modification was permitted in response to treatment-related toxicity. Median follow up was 47–49 months.

Compared with patients who underwent surgery alone, patients who received perioperative chemotherapy had markedly improved progression-free survival (difference between groups,  $P<0.001$ ) and overall survival (5-year survival rates of 36% versus 23%). As expected, they also had reduced tumor size and stage at surgery. Only 104 of 250 patients assigned to perioperative chemotherapy completed all six cycles; reasons for not completing chemotherapy varied, but patient choice was an important factor. The authors note that acceptability of this chemotherapy regime is impaired by the need for lengthy intravenous infusions, and suggest that substitution of newer agents such as capecitabine and oxaliplatin might improve patient compliance.

**Original article** Cunningham D *et al.* (2006) Perioperative chemotherapy versus surgery alone for resectable esophageal cancer. *N Engl J Med* 355: 11–20

## Liver transplantation improves quality of life in patients with polycystic liver disease

In advanced polycystic liver disease, liver transplantation (or liver–kidney transplantation, when polycystic kidney disease is also present) is an excellent therapeutic option, if cyst drainage does not improve the abdominal symptoms. As patients with polycystic liver disease often have normal liver function, however, it is difficult for many to opt for transplantation.