RESEARCH HIGHLIGHTS

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authors compared clinical features of patients in these two groups.

With the exception of serum total bilirubin levels, laboratory results were similar in patients with or without jaundice. Tumor location and pathological type were also similar in both groups. Furthermore, there was no significant difference in the radical resection rate (29.4% for nonjaundiced patients vs 38.1% in the jaundiced group; P > 0.05). Compared with patients in the jaundice group, patients without jaundice were significantly more likely to suffer from bile duct stones.

Although previous reports have suggested that the absence of jaundice corresponds to the early stage of EBDC, there was no overall difference between the two groups of patients in this study. The authors conclude that the presence of jaundice is not a reliable criterion to predict either the resectability or the extent of tumor progression.

Original article Tang H-H *et al.* (2004) Diagnostic and surgical therapeutic features of extrahepatic bile duct carcinoma without jaundice. *World J Gastroenterol* **10**: 3060–3061

Preventing acute rejection in pediatric liver transplantation

Kelly *et al.* have performed the first randomized controlled trial of immunosuppression in pediatric liver transplant patients. This multicenter, open-label trial compared the efficacy of the two currently available calcineurin inhibitors—tacrolimus and ciclosporin microemulsion—in 181 children undergoing primary liver allograft transplantation at age 9–56 months.

At the time of transplantation, the children were randomly allocated to tacrolimus or ciclosporin microemulsion at the recommended initial daily doses of 0.30 mg/kg and 10 mg/kg, respectively. All patients received concomitant corticosteroids and the ciclosporin group also received azathioprine for at least the first 3 months.

At 12 months, the estimated acute rejection free rate was significantly higher in the tacrolimus group compared with the ciclosporin emulsion group (55.5% vs 40.2%, P=0.0288), as was the estimated corticosteroid-resistant acute rejection rate (94.0% vs 70.4%, P<0.0001). Estimated patient survival, graft survival and the incidence of adverse events were similar in both groups. In contrast to some previous reports, the authors note that there was no evidence for an increased risk of lymphoproliferative disease in children treated with tacrolimus.

In conclusion, the dual tacrolimus/steroids regimen was more effective than the triple ciclosporin microemulsion/steroids/ azathioprine regimen in preventing biopsyproven acute rejection in these patients. In addition, tacrolimus was associated with a better cardiovascular risk profile and so may offer long-term benefits.

Original article Kelly D *et al.* (2004) Tacrolimus and steroids versus ciclosporin microemulsion, steroids, and azathioprine in children undergoing liver transplantation: randomised European multicentre trial. *Lancet* **364**: 1054–1061

Tegaserod for chronic constipation

The common problem of chronic constipation is traditionally treated with laxatives, but improvements tend to be short-lived. Johanson *et al.* have carried out a large, multicenter trial of tegaserod, a serotonin subtype 4 receptor partial agonist. The drug is thought to alleviate constipation by amplifying peristaltic and secretory reflexes.

This prospective study randomized 1,348 patients with chronic constipation (mean duration of 19 years). Following a 2-week baseline period, patients were randomized to receive twice daily doses of 2 mg or 6 mg tegaserod (n=450 and n=451, respectively) or placebo (n=447), for 12 weeks. Patients kept diaries throughout the study, recording timing and characteristics of bowel movements. Responders were defined as patients treated for at least 7 days who reported a mean increase of ≥1 complete, spontaneous bowel movement per week, compared with baseline.

Both doses of tegaserod produced a statistically significant increase in the frequency of bowel movements, compared with placebo. During the first 4 weeks of treatment, responder rates were 41.4% and 43.2% for patients in the tegaserod 2 mg and 6 mg twice daily groups, respectively, compared with