

the Thymoglobulin®-treated patients, but histologic grading and staging were similar between groups.

Although small patient numbers impact on the ability to draw significant conclusions about the impact of the differences in viral load between the two groups, these results form a good basis for further study.

*Rebecca Doherty*

**Original article** De Ruvo N *et al.* Preliminary results of a "prope" tolerogenic regimen with Thymoglobulin pre-treatment and hepatitis C virus recurrence in liver transplantation. *Transplantation* **80**: 8–12

## Growth patterns in children with end-stage liver disease after liver transplantation

Children with end-stage liver disease (ESLD) are often growth retarded before and after liver transplantation. Evans and colleagues therefore investigated the growth patterns in 72 children who were included in the National Institute of Diabetes and Digestive and Kidney Diseases Liver Transplantation Database.

Children were selected for inclusion in this study if they were less than 16 years of age at transplantation and had survived for more than 1 year following transplantation. Height measurements were obtained at baseline, 4 months after transplantation and at 1-year intervals from the transplantation date. Final height measurements were taken at 7 years post-transplantation.

Children who waited more than 1 year for a transplantation following diagnosis of ESLD were significantly smaller than children who waited less than 1 year. Patients who were growth retarded before transplantation experienced a substantially larger increase in height per year than children who were not. Although most children experienced accelerated growth soon after transplantation, the increase was not sufficient for this group to match the median heights of peers of the same age and sex at the study endpoint.

In summary, this study indicates that liver transplantation alleviates growth retardation in children with ESLD to a certain degree. A complete return to normal height after an average of 7 years was not shown, however. The authors conclude that in order to minimize the degree of growth retardation in children with ESLD,

liver transplantation should be performed as early as possible after diagnosis.

*Marie Lofthouse*

**Original article** Evans IVR *et al.* (2005) Post-transplantation growth among pediatric recipients of liver transplantation. *Pediatr Transplantation* **9**: 480–485

## Carbohydrate intake, glycemic load and glycemic index associated with cholecystectomy risk

The effect of high-carbohydrate diets on insulin-resistant individuals has been widely investigated; however, the effect of such diets and their associated high glycemic response on the risk of developing gallstone disease is less well documented. Tsai and colleagues have reported the results of a 16-year prospective study, which investigated the association between carbohydrate intake, glycemic load and index, and the incidence of cholecystectomy in a large cohort of American women.

In 1984, 70,408 women with no prior diagnosis of gallstone disease, who were involved in The Nurses' Health Study and aged 35–61 years, were mailed semiquantitative food-frequency questionnaires regarding their intake of carbohydrate-containing foods. Biennial follow-up questionnaires were completed until the year 2000, and calculations of total carbohydrate intake, glycemic load and glycemic index were compared with the self-reported occurrence of cholecystectomy.

In total, 5,771 cholecystectomy cases were reported over the 16 years of follow-up. A positive association was found between higher intakes of carbohydrates and cholecystectomy. For glycemic load and index, the relative risks of cholecystectomy for the highest compared with the lowest quintiles were 1.50 and 1.32, respectively.

The authors conclude that the quality and quantity of carbohydrate intake in women can be predictive of the risk of cholecystectomy, and highlight the need for more clinical studies to substantiate their findings.

*Katy Cherry*

**Original article** Tsai C-J *et al.* (2005) Glycemic load, glycemic index, and carbohydrate intake in relation to risk of cholecystectomy in women. *Gastroenterology* **129**: 105–112