

Sussman *et al.* followed eight consecutive patients with moderate-to-severe portopulmonary hypertension who were otherwise suitable candidates for liver transplantation. All received continuous infusions of epoprostenol 2–8 ng/kg/min for a mean of 6.5 months (range 2–15 months). Response to treatment was defined as a pulmonary artery pressure of <35 mmHg. Six patients responded to treatment within 6.5 months, one patient responded after 14 months, and one patient did not respond. Of the patients who responded to treatment, four patients received liver transplants and remained well 9–18 months later, two patients died before surgery could be performed, and one patient became too ill for it to be performed.

Portopulmonary hypertension resolved entirely in two of the transplant recipients; the other two recipients developed pulmonary hypertension that was controlled by oral medication. Sussman *et al.* theorize that lesions caused by pulmonary hypertension might eventually become irreversible; alternatively, a longer period of vasodilator treatment might be required.

Original article Sussman N *et al.* (2006) Successful liver transplantation following medical management of portopulmonary hypertension: a single-center series. *Am J Transplant* 6: 2177–2182

Gluten-free diet might decrease cardiovascular risk for patients with celiac disease

Celiac disease is often accompanied by low cholesterol levels, and it has been proposed that the standard treatment for celiac disease—a gluten-free diet—raises cholesterol levels, thereby worsening the risk of cardiovascular disease in these patients. A new study, however, has found that adoption of a gluten-free diet does not increase the cardiovascular risk of celiac disease patients, and might even lower it.

Brar *et al.* retrospectively reviewed the lipid profiles of 132 adults with celiac disease obtained before and ≥ 6 months after adoption of a gluten-free diet. All patients had biopsy-confirmed celiac disease that responded favorably to the diet. Although patients' total cholesterol levels rose significantly after adopting the gluten-free diet ($P < 0.0001$), this rise was

mainly caused by an increase in levels of HDL cholesterol ($P < 0.0001$), although there was also a trend towards increased LDL cholesterol levels. When the data for men and women were analyzed separately, however, the trend towards increased levels of LDL cholesterol did reach significance in men ($P = 0.02$). In addition, patients' LDL cholesterol:HDL cholesterol ratio decreased by a mean of 0.36 ($P < 0.0001$).

These results suggest that cardiovascular risk is not increased in celiac disease patients who adopt a gluten-free diet. As it has previously been shown that the risk of coronary heart disease decreases as levels of HDL cholesterol increase, it is possible that the demonstrated increase in levels of HDL cholesterol might have a protective effect in this population.

Original article Brar P *et al.* (2006) Change in lipid profile in celiac disease: beneficial effect of gluten-free diet. *Am J Med* 119: 786–790

MARS shows promise in the treatment of early allograft dysfunction

Early allograft dysfunction (EAD) after orthotopic liver transplantation causes marked morbidity and mortality. Conservative therapeutic measures that improve early allograft function are, therefore, desired to assist recovery from EAD and to act as a bridge to retransplantation.

Hetz *et al.* enrolled 12 consecutive liver graft recipients with EAD (aged >18 years) from a single Austrian center. EAD was diagnosed if two of the following criteria were satisfied: serum bilirubin levels >10 mg/dl; prothrombin time <40%; aspartate aminotransferase or alanine transferase levels >1,000 U/l; and plasma clearance rate of indocyanine green <10% per min within 72 h after graft reperfusion. The patients received one to six treatments with the molecular adsorbent recirculating system (MARS), an albumin-dialysis technique that can replace hepatic excretory and detoxification functions.

Compared with a historical control group of 11 patients who did not receive MARS support, MARS-treated patients with EAD had improved 1-year patient survival (66% versus 45%) and 1-year graft survival (66% versus 36%). No MARS-related adverse effects on hemodynamics or bleeding complications were reported, which led the authors to conclude