

LIVER TRANSPLANTATION

Predicting infectious complications after OLT

Two studies published in *Liver Transplantation* report potential methods for pretransplant identification of individuals at high risk of infection after orthotopic liver transplantation (OLT).

Mario Fernández-Ruiz and colleagues investigated whether the absolute number of lymphocytes or peripheral blood lymphocyte subpopulations (PBLs)

before OLT could predict risk of infection post-OLT in a prospective study of 63 patients with end-stage liver disease. 55% of patients had infectious episodes in the first 2 years post-OLT. Both the mean total lymphocyte count and PBLs levels at baseline were significantly lower in patients who had an infection than in patients who did not. The authors concluded that total lymphocytes or PBLs counts might be clinical surrogate markers of the immune status of the OLT recipient and are associated with the risk of post-OLT infection.

Carlos Cervera *et al.* analyzed tissue from the liver donors of 95 OLT recipients for functionally relevant polymorphisms in *MBL2*, the gene that encodes mannose-binding lectin (MBL), an important factor in innate immunity mainly produced in the liver. They then evaluated the influence of donor and recipient *MBL2* genotypes on the incidence and outcomes of infections in the OLT recipients. Although no difference

in the incidence of infections was found, survival was lower in patients receiving a liver graft from a donor with an exon 1 *MBL2* variant genotype and these patients had higher infection-related mortality (50% versus 14%). In addition, patients receiving a liver graft from a donor with an exon 1 *MBL2* variant genotype had a higher incidence of septic shock (46% versus 11%).

The authors of both studies conclude that the risk factors they examined require further investigation in large prospective studies to confirm their usefulness as predictors of infectious complications post-OLT.

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Original articles Fernández-Ruiz, M. *et al.* Pretransplant lymphocyte count predicts the incidence of infection during the first two years after liver transplantation. *Liver Transpl.* 15, 1209–1216 (2009).

Cervera, C. *et al.* Donor mannose-binding lectin gene polymorphisms influence the outcome of liver transplantation. *Liver Transpl.* 15, 1217–1224 (2009).



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