**DE NOVO INFECTION
WITH HBV AFTER OLT**

The characteristics of *de novo* HBV infection after orthotopic liver transplantation (OLT) are poorly understood. Wei-Ju Su and colleagues now report that children in Taiwan who have been vaccinated against HBV and who acquire *de novo* HBV infections after OLT are often infected by HBV that has a mutation in the gene encoding the hepatitis B surface antigen (HBsAg). “The risk of acquiring a *de novo* HBV infection is relatively high in an area, such as Taiwan, that is hyperendemic for HBV,” comments Yen-Hsuan Ni, corresponding author on the study. “It is not feasible to exclude liver donors who have antibodies to the HBV core antigen in Taiwan, but 97% of infants are vaccinated against HBV,” he adds.

Out of 50 HBsAg-negative pediatric transplant recipients, nine patients (18%) became HBsAg positive after OLT, classifying them as having a *de novo* HBV infection. Four of these patients were persistently HBsAg positive. “These patients are immunocompromised, so it is interesting that five of the children recovered from the infection and produced anti-HBsAg antibodies,” comments Ni. Mutations in the major S gene, which encodes HBsAg, were found in eight of the nine children with a *de novo* HBV infection. The mutations in six of these children were in the ‘a’ determinant region of the gene. Further study is required to establish causality and determine whether specific mutations underlie the development of HBV infection.

“As we continue to conduct our vaccination program and put in place measures for prophylaxis, such as administering HBV immunoglobulin during the anhepatic phase of OLT and lamivudine immediately after OLT, monitoring HBsAg status and the antibody titer against HBsAg, and giving booster HBV vaccines after OLT, we hope to eliminate *de novo* HBV infection after OLT in Taiwan,” concludes Ni.

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