

TRANSPLANTATION

Liver-transplantation outcomes poor for IFN-treated patients with HCV

IFN treatment in HCV-infected patients before liver transplantation is associated with poor outcomes and aggressive recurrence of HCV after transplantation, according to Smallwood and colleagues at Emory University School of Medicine, Atlanta, GA.

Outcomes have worsened and survival has decreased in the past decade for patients with HCV who have undergone liver transplantation. Smallwood and colleagues considered the role of IFN therapy, which is now widely available to patients with HCV: "...we recognized that many more patients were coming to liver transplant [sic] after being treated for HCV with these [IFN]-based therapies," Smallwood explained.

The researchers evaluated 131 patients with HCV who underwent liver transplantation after 1998 for whom data on exposure to IFN-based therapies was

available. A total of 45 of these patients received IFN therapy before transplantation. Survival and outcomes, such as time to recurrent HCV following liver transplantation, of grafts and patients were monitored.

“...survival of grafts and patients was ... decreased in [those] who had received IFN therapy...”

Patients who received IFN-based therapy before transplantation had a shorter time to and more aggressive recurrence of HCV following liver transplantation than those who had never received IFN treatment. The researchers also found that survival of grafts and patients was notably decreased in patients who had received IFN therapy before transplantation.

According to Smallwood, in the past, very few patients who underwent liver transplantation had been treated for HCV, whereas now many patients have received antiviral therapy, and the number of patients with HCV who receive transplants has increased. The present study identifies IFN-treated patients with HCV as a population that is likely to have a poor response to orthotopic liver transplantation. "Future research should be geared [towards] the optimal time to treat patients for HCV following liver transplantation as well as the prevention of rejection in this at-risk population," Smallwood recommends.

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Original article Smallwood, G. A. *et al.* Does interferon use before liver transplant influence hepatitis C outcomes following transplantation? *Transplantation* **86**, 1795–1798 (2009).