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J. Karkhanis

Zucker School of Medicine at Hofstra/Northwell

E. C. Verna

M. S. Chang

R. T. Stravitz

M. L. Schilsky

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Authors

J. Karkhanis; E. C. Verna; M. S. Chang; R. T. Stravitz; M. L. Schilsky; W. M. Lee; and R. S., Jr. Brown



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Reply

Jamuna Karkhanis, M.D.¹, Elizabeth C. Verna, M.D., M.S.¹, Matthew S. Chang, M.D.¹, R. Todd Stravitz, M.D.², Michael L. Schilsky, M.D.³, William M. Lee, M.D.⁴, and Robert S. Brown Jr., M.D., M.P.H.¹

¹Department of Medicine, Columbia University College of Physicians & Surgeons, New York, NY

²Section of Hepatology, Virginia Commonwealth University, Richmond, VA

³Division of Digestive Diseases and Section of Immunology and Transplantation, Department of Medicine and Surgery, Yale University School of Medicine, New Haven, CT

⁴Division of Digestive and Liver Diseases, Department of Internal Medicine, University of Texas Southwestern Medical Center, Dallas, TX

We thank Fujiwara et al. for their comments on our study “Steroid use in acute liver failure.”¹

They note that corticosteroids (CS) may be helpful when used early in acute liver failure (ALF) while the transaminases are high and bilirubin level is low. This is usually preceding the development of encephalopathy and thus does not represent true ALF. In their study,² only a small number of patients (13 of the 31) met standard criteria for ALF (international normalized ratio >1.5 and encephalopathy). Additionally, their study focused entirely on viral hepatitis, many of whom may have derived benefit from antiviral therapy, rather than CS, whereas our study looked solely at autoimmune, drug-induced, and indeterminate ALF with no patients with viral hepatitis being included. Our study had 361 patients, which allowed for more statistically significant results. In the study referred to by Fujiwara et al., there was no survival benefit, only a lowering of transaminase values. We did show a benefit in spontaneous survival with steroid use in patients with higher levels of alanine aminotransferase (ALT), which does parallel their experience.

Unfortunately, with a large, multicenter cohort study designed to investigate ALF, we could not control for the timing, dose, or duration of steroids nor could we systematically study early steroid administration. Our findings across all subgroups suggest that there is no survival benefit with steroid use, once patients have progressed to encephalopathy and liver failure. Whether earlier steroid use provides benefit in those with high ALT levels deserves further study. Overall, the risks and benefits of CS administration should be carefully weighed and early discontinuation considered, as Dr. Fujiwara also notes, in the absence of a clear beneficial effect, particularly in high Model for End-Stage Liver Disease patients.

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