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Hepatology Highlights

Claudio Tiribelli, MD, PhD[1]

The benefit of adding Sodium Nitroprusside (NPNa) or S-nitrosoglutathion (GSNO) to the University of Wisconsin Solution (UW) to prevent morphological alterations during cold preservation/reperfusion of rat livers. Alejandra B. Quintana, *et al*.

This paper extends the intriguing observations previously provided by this group on the reduction of the liver damage following cold preservation by the addition of nitric oxide (NO) donors. This group previously reported in this and other journals that the addition to UW solution of nitrosoglutathione (GSNO) was associated with a less marked liver damage as assessed both at functional and circulatory level. In the present paper the authors expand their work by analyzing the effect of two different NO donors (GSNO and sodium nitroprusside, NPNa) in preventing the morphological alteration following cold perfusion of rat liver. After 48 hours of cold perfusion, severe morphological alterations of hepatocytes (ballooning and hollowing) were observed. This was associated with a rearrangement of the collagen and reticulin network explaining the increased resistance during reperfusion of the cold stored liver. Most interesting was the observation that albumin production was confided to the pericentral area of the lobule. Addition of either NPNa or GSNO to UW solution clearly and markedly reduced the cold-induced changes with an almost normal liver architecture, normal appearance of the hepatocyte and albumin synthesis evenly distributed within the lobule. Collectively, these data add another piece of information to the key concept that the addition of NO donors to the UW solution will improved the function of the liver to be transplanted from one hand, and increase the time for its handling form the other. The clinical impact of these novel concepts is evident.

Serum interleukin 6 and interleukin 12 levels in children with chronic hepatitis HBV treated with interferon alpha. Magdalena Góra-Gębka, *et al.*

There is an increasing need to have prognostic indices to predict possible response to interferon treatment both in HBV- and HCV-related liver disease. The possibility to define beforehand whose patients will benefit from the long and expensive treatment will allow to confine the side effects of IFN to potential responders from one hand, and to rationalize resources from the other. This paper provides a negative, although interesting answer to this major medical problem. Children with HBV-related chronic hepatitis were treated with IFN for 20 weeks, and the serum level of 2 cytokines (interleukin 6 and 12) determined before and after treatment. The serum level of both interleukin 6 and 12 did not show any correlation with the severity of the liver disease (assessed both at the histological and biochemical level), did not correlate with the response to treatment (seroconversion) and did not changed before or after INF. Then serum levels of interleukin 6 and 12 are no predictors of a possible successful treatment of HBV infection. In a scientific world primarily interested in "positive" data, it is good to have information on something that is not useful and, therefore, should not be performed. In the case of an expensive determination such as interleukins, this information is even more useful.

Claudio Tiribelli, MD, PhD
Professor of Medicine and Biochemistry
CSF-Dept. BBCM
University of Trieste
Via Giorgeri 1
34127 Trieste Italy

[1] CSF and Department of BBCM, University of Trieste, Trieste, Italy.