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Hepatology Highlights

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Incidence and prevalence of hepatitis C virus infection in Chile

Although the HCV infection has been identified as a major health problem in the Western world, no definite data are available on the relevance of this problem below the equator. The paper by Gonzales et al. fills this gap by reporting the prevalence and incidence of HCV infection in Chile. A reasonably large number of subjects were screened in 1993 and 2000 after enrollment in the nationwide study on the prevalence of gallstones. Subjects of two different ethnic groups were selected, one Hispanic (Caucasian) and one Amerindians (Mapuche Indians) living in an isolated island. Unfortunately the sample size differs dramatically being almost 9 times higher for the Hispanics claiming for caution in extrapolating the results on a larger, countrywide basis. Interesting, although not surprisingly, was the observation that the prevalence of HCV in Hispanics was almost identical to what observed in Europe, the country from where the ancestors of those subjects originated. Even more interesting was the observation that no HCV infection was found in the 145 Mapuche Indians screened. It would be intriguing to understand whether the lack of infection in Indians is due to their geographical isolation and/or other factors (genetic?) protecting this ethnicity from infection. Unfortunately the study does not answer this challenging question. It would be of great epidemiological, clinical and pathophysiological significance to understand if the infectivity of HCV may differ in ethnic groups. This paper paves the way for this future fascinating research.

A prospective randomized trial of N-acetyl cysteine administration during cold preservation of the donor liver for transplantation

The paper by Khan and colleagues addresses an interesting and still poorly defined issue such as the potential beneficial role of antioxidant substances [nacetyl cysteine (NAC) in this case] in preventing the ischemia/reperfusion (I/R) hepatic damage. Data obtained in animal models have indicated the efficacy of antioxidant treatment(s) in preventing the reperfusion damage and ameliorating the graft function; solid in vivo data in human are however missing. The data reported by Khan somehow reduce the gap between rats and humans although we are still far from a proper answer. In this study they administered 10 grams of NAC before cardiac arrest and 5 grams in the portal vein during cold ischemia in 9 patients while an equal number or untreated organs served as control. NAC addition did not result in any protective effect from the injury assessed by AST activity, histology and acute rejection episodes. It is not clear whether the lack of effect was due to lack of real antioxidant effect due to insufficient dosage or other undefined mechanisms. However, although negative this study points to the need for additional clues on how to prevent I/R damage in the clinical practice. It also points for caution in the extrapolation of data obtained in animals to the much more complicated and somehow unpredictable model of human beings.

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