



Hepatology highlights

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Pawar SV, *et al.*

Most overweight and obese Indian children have nonalcoholic fatty liver disease

Pawar SV, *et al.* The authors from Mumbai in India evaluated in their careful prospective school based cross sectional study a group of children in the age group from 11 to 15 years, measured their height and weight, and calculated the respective BMI. As expected, a liver biopsy as a gold standard to establish the diagnosis of NAFLD was not warranted, especially under the aspect of a clinical study and the risk of such invasive diagnostic procedure. Instead, the diagnosis of NAFLD was made by investigations used in daily clinical practice. These included elevated ALT, ultrasonography with the presence of at least two of three abnormal findings (diffusely increased liver echogenicity, vascular blurring, and deep attenuation of the ultrasound signal), and Fibroscan to measure stiffness in the right lobe of the liver. The diagnosis of NAFLD did not differentiate early and late stages but included steatosis, steatohepatitis, and significant fibrosis. Among the 616 children screened for overweight and obesity, 198 (32.1%) were overweight and obese. The prevalence of NAFLD was 53% in overweight and 13% in obese children, and with 34% it was unexpectedly high in children with a normal BMI. Prevalence of NAFLD was dependent on diagnostic modalities and gender. In boys, prevalence of NAFLD was highest with 27.3 using the combination of Fibroscan and

ALT, while for girls prevalence was highest with 42.3% using ultrasonography alone. Compared to children lacking NAFLD, those with NAFLD failed to significantly change many of the parameters that were assessed, with the exemption of the increase of the AST to platelet ratio index, the serum AST, serum triglycerides, and systolic blood pressure.

In essence, this study shows a high prevalence of NAFLD in asymptomatic children in India, which is often but not always associated with an increased BMI. The authors note that the pediatric NAFLD may behave differently in Indian children compared to other countries and suggest that Fibroscan has only a limited role in screening. They strongly recommend screening for NAFLD in this high risk group using ALT and ultrasonography. It is also clear from this study that in face of unavailable non-invasive diagnostic biomarkers, the diagnosis of NAFLD is hard to ascertain, especially also its various disease stages. Early recognition of the disease with its broad spectrum is mandatory to prevent late stages such as liver cirrhosis including HCC, which are problems worldwide and not confined to India.¹ The present study is in line with previous statements that non-invasive biomarkers are challenges assessing patients with suspected NAFLD,² and serum aminotransferase levels as well as imaging tests including ultrasound may not reliably assess steatohepatitis and fibrosis in patients with NAFLD.^{1,2}

De Keyzer B, *et al.*
**Percutaneous shunt reduction for the
 management of TIPS-induced acute liver
 decompensation. A follow-up study**

De Keyzer B, *et al.* In this issue, the authors from Leuven in Belgium report in a follow-up study on their experience managing TIPS-induced acute liver decompensation by percutaneous shunt reduction. Their large study cohort consisted of 347 patients, who underwent a TIPS procedure, but in 21/347 patients (6%) acute liver decompensation. Although rare, this is a serious complication that required active management using a percutaneous shunt reduction technique in these 21 patients, which was technically feasible but associated with a one-month mortality rate of 29% and a six-month mortality rate of 49%. Most of the patients had alcoholic liver cirrhosis

(57%) and likely represent a high risk cohort. The authors should be congratulated for providing data originating from such a large cohort and presenting extremely good efficacy of TIPS, since as much as 94% of the patients did not develop acute liver decompensation.

Unquestionably, TIPS will be indicated in many more future patients with decompensated liver cirrhosis to treat ascites refractory to medical treatment as well as poorly controlled bleeding from esophageal varices. Patients with these complications and those not meeting indication criteria of liver transplantation will profit from TIPS,³ to be best provided by centers with profound TIPS experience in many patients. In addition to the benefits shown in this study, TIPS can also ameliorate renal functions, which are often impaired in patients with decompensated liver cirrhosis.⁴

Baptista-González H, *et al.*
**Frequency of hepatitis C virus infection in
 a single institution in Mexico with a focus on
 birth-cohort population**

Baptista-González H, *et al.* In their cross-sectional study carried out in Mexico City with surrounding areas, using a large study group, the authors analyzed the prevalence of HCV infection with special reference to birth-cohorts including the group of baby boomers. Analyzed were 7,658 individuals for HCV antibodies and HCV RNA. The global prevalence of HCV antibodies was 4.5%, with 10.9% in baby boomers born before 1945, 7.3% in individuals borne 1945-1965, and 2.3% in persons born 1966-1992. Within these cohorts, individuals were positive for HCV RNA at 89%, 69 %, and 44%, respectively. These data sug-

gest that baby boomers are at particular risk of chronic HCV infection, as its prevalence was twice that of individuals born after 1965.

The importance of this study is highlighted by the high prevalence of HCV infections in patients with with chronic liver disease in Mexico, which amounts to 36% according to recent studies.^{5,6} Key questions remain as to which laboratory or serological parameters are most useful to screen the Mexican population effectively for HCV infection in order to treat affected patients and to overcome individual health hazards and the national health and economic burden due to progress from chronic HCV infection to liver cirrhosis and HCC. Careful HCV screening is prerequisite for initiating an antiviral therapy, which is beneficial in most patients with HCV infections.⁷ This calls for an effective nationwide screening program for HCV in Mexico.

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