



## Hepatology Highlights

Claudio Tiribelli<sup>1</sup>

### Prevalence of Non-alcoholic fatty liver disease: Population based studies, by Deepak Amarpurkar *et al.*

This study is somehow a follow-up of another study performed by the same group (Ann Hepatol 2007;6:35-40) where the prevalence of fatty liver was evaluated among autopsies performed over 5 years period of time in the Mumbai area. In this report the prevalence of non alcoholic fatty liver disease (NAFLD) was investigated in a cohort of 1,168 railways workers in living in the same geographical basin. After the exclusion of any possible co-factors of fatty liver (viral infection, alcohol consumption, underlying known liver disease or drug assumption) 730 subjects were enrolled and fatty liver assessed by ultrasound. The overall prevalence of steatosis was 19% but increased in males (particularly when older than 40 years), obese and hyperglycemic subjects. Unfortunately, as in most of the studies so far reported, there is no possibility to differentiate the benign NAFLD from the most severe NASH. The figure is surprisingly similar to other series reported in Western general population (the Dionysos Study as a landmark example) where fatty liver was detected in about 17% of the general population with a clear increment when one or more markers of the so called "metabolic syndrome" was present. This similarity points to the conclusion that fatty liver is indeed closely associated with obesity and/or diabetes and/or hyperlipidemia regardless the type of diet or the genetic background. It also suggests that the spectrum of fatty liver due to increased caloric intake and/or reduced exercise is uniformly widespread in the world pointing to the need for active and rapid measures based on multidisciplinary approach. Fore sure fatty liver will keep us busy in the future.

### Geographical distribution of HCV genotypes in Mexico, by Juan Francisco Sanchez-Avila *et al.*

Geographical difference in the prevalence and incidence of various diseases has triggered the interest of clinical epidemiologists and medical investigators since a long time. Hepatitis C is a major health problem as some 150 million chronic HCV carriers are present throughout the world. Based on the studies performed in representative cohorts, it is clear that the prevalence varies substantially in different geographical areas. A population-based survey sample on more than 21,000 subjects participating to the third National Health and Nutrition Survey (NHANES III) in the US found a prevalence of anti-HCV of 1.8%. By contrast, in Africa, the prevalence increased to more than 20 % reaching a peak of 51% in an Egyptian population living along the delta of the Nile River. In Western Europe, the overall prevalence is approximately 1%, but increases moving from North to South. The same geographical distribution applies to Italy where the prevalence of HCV infection moves from 3% in the North to 20% in the South. The study by Sanchez-Avila and colleagues adds another piece to the puzzle by describing the Mexican reality. Among 1,390 HCV positive subjects collected during a 4 year period (2003-06), genotype 1 accounted for 70% followed by genotype 2 (20%) and genotype 3 (about 10%). Intriguingly a very low prevalence of either genotype 4 and 5 was detected while genotype 6 was absent. When the data was stratified according to the different regions of the country, genotype 3 (and 2) was about 50 times more present in North than in South, where type 1 accounted almost for the all of the HCV-infected subject. This distribution is very similar to that reported in other countries suggesting a global trend in the geographic gradient in HCV infection (prevalence) and genotype (type 1) distribution moving from North to South in the Northern Hemisphere. The reason(s) still remains largely unexplained and additional cooperative work is clearly needed.

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<sup>1</sup> Professor of Medicine. Director Centro Studi Fegato (Liver Research Center).

Address for correspondence:  
Claudio Tiribelli, MD PhD  
Bld. Q AREA Science Park Campus Basovizza  
ss 14 km 163.5  
34012 Trieste – Italy  
E-mail: ctliver@csf.units.it