

Preface



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Guest Editor

Non-alcoholic fatty liver disease (NAFLD) is recognized as an important cause of chronic liver disease worldwide. NAFLD is strongly associated with metabolic conditions, including central obesity, insulin resistance, dyslipidemia, and hypertension. NAFLD is considered the hepatic manifestation of metabolic syndrome. NAFLD progression is related to the histologic subtype of non-alcoholic steatohepatitis (NASH). An estimated 15% to 20% of cases of NASH may progress to advanced stages of fibrosis. Many steps in the pathogenesis of NAFLD and NASH are ill defined, but insulin resistance and adipokines seem to play predominant roles. Because effective treatments for NASH are yet to be developed, several potentially promising treatment approaches are under active investigation.

This issue of *Clinics in Liver Disease* presents the views of several internationally renowned NAFLD experts on current findings concerning the epidemiology, natural history, diagnosis, pathogenesis, and treatment of NAFLD. The first article in this issue, by Dr. Janus Ong, provides an update on the epidemiology of NAFLD and NASH. The successive three articles focus on the pathologic definition of NASH as reviewed by expert hepatopathologists; the role of liver biopsy and serum markers, addressed by Dr. Paul Angulo; and the usefulness of radiologic modality, covered by Drs. Phunchai Charatcharoenwitthaya and Keith Lindor. Next, three experts provide details on the pathogenesis of NAFLD—Dr. Jacob George considers animal models of NAFLD; Dr. Arthur McCullough reviews human data; and Dr. Giulio Marchesini considers metabolic syndrome and its impact on NAFLD. Dr. Nathan Bass and colleagues address medical

treatment of NASH, and Dr. John B. Dixon covers issues related to weight-reduction surgery and its impact on NASH. Dr. Eve Roberts presents recent work on the importance of NAFLD in children, and Dr. Elizabeth E. Powell and colleagues address the issue of NASH as a cofactor in other liver diseases. Dr. Elisabetta Bugianesi covers the interaction between NASH and hepatocellular carcinoma. Finally, Drs. Ancha Baranova, Lance Liotta, and Emanuel Petricoin discuss the role of new technologies, such as genomics and proteomics, in understanding NAFLD and developing new biomarkers for NAFLD.

During the next decade, as understanding of the clinical and mechanistic issues related to NAFLD and NASH grows, we will be able to provide more targeted therapeutic options for these patients and develop more accurate diagnostic biomarkers.

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