

Non-Alcoholic Fatty Liver Disease: What We Need to Know

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Abstract

Nonalcoholic fatty liver disease (NAFLD) represents the accumulation of lipids in the hepatocytes, lipids represented by triglycerides (most frequently), cholesterol, phospholipids, and sphingolipids. NAFLD is rapidly becoming one of the most important causes of chronic liver disease, liver cirrhosis and liver transplantation in developed countries. It can present as simple steatosis, which is usually a benign condition, to steatohepatitis, which may lead to advanced fibrosis and cirrhosis. Although there are many risk factors for the development of fatty liver disease, a central role is played by metabolic disorders: obesity, diabetes mellitus and dyslipidemia. The common mechanism in the development of NAFLD is represented by the accumulation of triglycerides in the liver. The accumulation of lipids in the liver is secondary to an increased dietary intake of lipids and fatty acids or to a decrease of fatty acid beta-oxidation, and to their increased synthesis in the hepatic mitochondria. The therapeutic approach to patients with NAFLD depends on the type of disease. Patients with simple steatosis only require surveillance of the liver disease and treatment of comorbidities (hypolipemiant, antihypertensive medication, antidiabetics). On the other hand, lifestyle changes, weight loss and pharmacological treatment are recommended in patients with steatohepatitis. Ursodeoxycholic acid, vitamin E and antidiabetic agents have been shown to improve biological and histological parameters in these patients. Many drugs (such as elafibranor, a dual agonist of the PPAR α/δ receptor) are currently being investigated in clinical trials for the treatment of patients with NASH, and are expected to be on the market in the near future. In conclusion, as the incidence and prevalence of NAFLD increase, it is important to identify the patients at risk of developing advanced fibrosis and cirrhosis.

Key words: non-alcoholic fatty liver disease, steatosis, steatohepatitis, hepatic inflammation, fibrosis, cirrhosis.