## Non-Alcoholic Fatty Liver Disease : The Global Epidemic

Gourdas Choudhuri and P. Piramanayagam

Department of Gastroenterology,

Sanjay Gandhi Postgraduate Institute of Medical Sciences,

Lucknow, India.

## **Abstract**

Non- alcoholic fatty liver disease (NAFLD) comprises a spectrum of liver disease which encompasses steatosis, steatohepatitis and cirrhosis. Over the past 2 decades, NAFLD is being increasingly recognized as a manifestation of insulin resistance and metabolic syndrome.

The prevalence of NAFLD in community based studies varies from 2.8% (based on unexplained raised serum transaminases in USA) to 23% (based on USG evaluation of "fatty liver" in Italy). Contrary to earlier notion that NAFLD is a disease of affluent countries, data from developing countries, including India show similar high prevalence of 18% (India) to 20% (China).

Natural history of NAFLD, as elucidated from serial liver biopsy studies, suggest slow progression in upto one third. While patients with steatosis have <1% risk of liver related mortality, 9-25% of those with NASH die due to end stage liver disease within 10 years.

Since NAFLD is considered as hepatic manifestation of metabolic syndrome, treatment of NAFLD entails correcting components of the same (Obesity, hypertension, diabetes mellitus, hypertriglyceridemia). Lifestyle modification, including restricted dietary intake of high energy foods, and aerobic exercises to achieve ideal body weight are the key components of treatment of NAFLD. Results from controlled trials have shown improvement in liver enzymes, insulin resistance and quality of life with lifestyle modification. Long-term sustainability of weight reduction by lifestyle modification needs constant patient motivation. Promising pharmacological options include insulin sensitizers and anti-obesity drugs.

With rising prevalence of obesity, diabetes, hypertension, NAFLD is emerging as a global epidemic with far reaching implications. "Prevention is better than cure". Promoting healthy lifestyle holds the key to check this growing global epidemic.

Keywords: non-alcoholic fatty liver disease, steatosis, steatohepatitis, cirrhosis