GI disease

Non-alcoholic fatty liver disease on the increase

The prevalence of non-alcoholic fatty liver disease (NAFLD) is rising, a large study from the United States has found.

Using information from the Veterans Administration national Corporate Data Warehouse for their study the authors set out to identify incidence and prevalence rates for NAFLD together with trends over time.

NAFLD was identified by two or more raised transaminase levels, six months apart, in the absence of evidence of chronic hepatitis B or C or suggestion of problematic alcohol use, for patients attending between 2003 and 2011. These criteria were found to have good sensitivity and specificity when analysed in more depth for a smaller cohort of the study population.

Of almost 10 million (9,784,541) patients included in the study 1,330,600 were identified as having NAFLD. The number of incident cases of NAFLD (using the date of the first abnormal transaminase result as the incident date) ranged from 116,000 to 145,000 per year.

There was some evidence that the incidence rate per 100 persons fell during the study period, from 3.16 (95% CI: 3.14-3.17) in 2003 to 2.5 (95% CI: 2.49-2.52) in 2011.

The incidence of NAFLD was highest in the 45 to 64-year age group for most years of the study. However, the greatest increase in incidence was seen in those under 45 years. In this group the annual incidence increased from 2.3 in 2003 to 4.3 per 100 persons in 2011, annual percentage change 7.4% (95% CI: 5.7-9.2%).

The age-adjusted prevalence per 100 persons increased 2.8-fold from 6.28 (95% CI: 6.26-6.30) in 2003 to 17.61 (95% CI: 17.58-17.65) in 2011. This increase was evident in all ethnic groups and age groups, and in both genders.

A large subgroup of those with NAFLD had sufficient additional data to allow an estimation of the risk of disease progression – just over 20% were found to be at high risk of developing advanced fibrosis.

Until recently NAFLD was considered to be uncommon and relatively harmless. It is now recognised that NAFLD is the most frequent cause of chronic liver disease in the United States, and it is thought to affect an estimated one in five people in the UK. At least 20% of patients with NAFLD will go on to develop progressive liver disease i.e. non-alcohol related steatohepatitis (NASH), and over time between 10 and 20% of those with NASH are likely to develop cirrhosis.

Common risk factors for NAFLD are obesity, lack of physical exercise, insulin resistance and other features of metabolic syndrome, and modification of these risks may provide opportunities to reduce or stop disease progression.

The authors found a high prevalence of NAFLD which increased significantly over the study period, and this suggests that this condition will remain an important cause of morbidity. It is of some concern that the incidence of NAFLD increased most quickly in the relatively young i.e. the under 45 age group.

On a more hopeful note the overall yearly incidence of NAFLD decreased during the study, and the authors postulate that this may reflect a decrease in the rate of increase of obesity and diabetes in the US.

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Kanwal F, Kramer JR, Duan Z et al. Trends in the burden of nonalcoholic fatty liver disease in a United States cohort of veterans. *Clin Gastroenterol Hepatol* 2016;14:301-08

Addiction

Continuing in methadone treatment associated with reduced risk of death

Risk of mortality from all causes increases following cessation of methadone substitution treatment, a study in *Addiction* has confirmed. The risk was highest during the first four weeks after stopping treatment.

The study cohort included 6,983 patients, aged 18-65, who had all received at least one methadone prescription during the six-year study period, representing a total of almost 3 million methadone prescriptions. More than half of those studied were under 30 years old and just over two thirds were men. More than half of the patients had five or more treatment episodes during the study period. The median duration of each treatment episode was 83 days, while almost 60% of those studied had had at least one treatment period lasting more than a year.

Forty per cent of patients had at least half of their methadone doses administered under supervision at least once a week.

Co-prescribing of benzodiazepines, antidepressant and antipsychotic medications for the study cohort was high, with incidences of 71%, 48% and 23% respectively.

During the study 213 patients died, 115 while on treatment and 98 while off treatment. Overall 78 deaths were attributed to poisoning. Toxicological data were available for 74 of these deaths; opioids were the most frequently identified drug class