EDITOR'S CHOICE

Non-alcoholic fatty liver disease

Fiona Godlee *editor, BMJ*

What do you know about non-alcoholic fatty liver disease (NAFLD)? Almost nothing, in my case, until I read the two articles on the subject in this week's *BMJ* (doi:10.1136/bmj.d3897, doi:10.1136/bmj.d4460). Perhaps anyone in the same boat can be forgiven. As explained in a review article just published online in the *BMJ*'s sister journal *Gut* (2011;60:1152-8, doi:10.1136/gut.2010.218214), although the condition was first recognised in the 1930s, named in the 1960s, and characterised histopathologically in 1980, the substantial and growing global burden from NAFLD, and its likely impact on individuals and public health, are only now becoming clear. Once a curiosity for histopathologists and hepatologists, NAFLD is now recognised as a common condition (or spectrum of disease) affecting both adults and children, especially those with obesity, type 2 diabetes, insulin resistance, and dyslipidaemia. Most obese adults and many obese children have it, as do some people of normal weight. It is often asymptomatic or discovered incidentally on routine blood tests. As the review in *Gut* explains, it may be more than just a manifestation of the metabolic syndrome: it may actually contribute to cardiovascular disease through the release of pro-inflammatory mediators that damage the endothelium. In a minority of patients it may progress to liver fibrosis, cirrhosis, and liver cancer—it may be the main and largely unrecognised cause of hepatocellular carcinoma in developed countries. There is no definitive diagnostic test apart from liver biopsy, and no specific treatment. So it's a big and growing problem, but exactly how big? We don't yet know, say Quentin Anstee and colleagues in their Uncertainties Page (doi:10.1136/bmj.d3897) and in this week's podcast (<http://podcasts.bmj.com/bmj>). The lack of a simple

non-invasive screening test leaves us largely in the dark about its prevalence in unselected populations. However, it is now the commonest cause of abnormal liver biochemistry in many developed countries, and it is estimated to affect 40-70% of people with type 2 diabetes.

Prognosis is also uncertain, and since there is no specific treatment to offer patients, one could question the benefit of diagnosis. But Anstee and colleagues say it is worth identifying patients. They can benefit from weight loss and exercise, other management of risk factors, and surveillance for cirrhosis and liver cancer. However, there's insufficient evidence for routine screening of the general population. No evidence based guidelines on diagnosis and management are currently available, but the Uncertainties article includes a useful algorithm, and you can find comprehensive guidance in Best Practice (<http://bit.ly/pG9rea>). In their article on NAFLD in children, Ronny Cheung and Deirdre Kelly advise that all obese children with abnormal liver function tests should have initial screening with magnetic resonance imaging, ultrasonography, and liver function tests (doi:10.1136/bmj.d4460).

As for resolving the many uncertainties around NAFLD, there is much work to do. Several international collaborative research programmes in Europe and the United States are looking into genetic factors, pathophysiological mechanisms, diagnostic tests, prognosis, and treatment. While we await some answers, NAFLD presents another urgent reason to address the global timebomb of obesity.

Cite this as: *BMJ* 2011;343:d4652