Non-alcoholic fatty liver disease: a non-problem or public health catastrophe?

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Non-alcoholic fatty liver disease (NAFLD) is regarded as a time bomb that is ticking loudly, but may never go off. If it does, will it be with a pop or a bang? Although some aspects of NAFLD are understood, much remains unclear. Indeed, the paper by Mouralidarane *et al*¹ describes the current state of knowledge exceptionally well, but owing to an incomplete evidence base it is unable to provide the jobbing gastroenterologist with clear answers to five key questions (*see page 149*). When answers are unclear, opinions differ and patients receive variable management. This leads to wasted effort and resource and, worse still, to patient confusion. Patients may worry unnecessarily and/or be stigmatised by a non-disease.

The first unresolved question is: what is the future impact of NAFLD? Will the bomb pop or bang? What is going to happen as a result of the obesity epidemic affecting Western societies? Extrapolating forward some might have us believe that we are headed for an explosion in the number of patients with chronic liver disease and, eventually, hepatoma. But is this a credible scenario? It seems more likely that other obesity comorbidities, such as heart disease and stroke, will overwhelm the impact of chronic liver disease in this group of patients.

The second question is whether we should biopsy patients and, if so, in what circumstances. A liver biopsy carries significant morbidity and so those patients who wish to share in decision-making would need a robust reason before agreeing to have one. There are three principal reasons to carry out a biopsy: if there are concerns about another diagnosis; if the biopsy might influence further management; or when the patient has consented to an ethically approved research protocol which requires liver biopsy. After all the appropriate tests have been done the probability of an unsuspected diagnosis is

very low. Does the probability of finding something—and being able to do something about it that will help the patient—outweigh the risks? This benefit/risk balance judgement has to be made with the explicit understanding that risks happen immediately and benefits are accrued many years or decades in the future. We clearly need non-invasive methods of defining and monitoring higher-risk patients but, given the longevity of the disease process, it will be some time before we know how these methods will impact upon patient care.

The third question is what treatment should they receive. We would all agree that patients with NAFLD who are overweight should lose weight, and those with diabetes should have excellent control of their diabetes. This is despite the fact that there is little evidence to show that weight loss reduces liver-related mortality. Beyond this, there is not much we can say with certainty. There has never been a stronger case for some well-conducted national trials with important clinical outcomes. In the time scales of typical trials we might demonstrate a reduction in fat and inflammation, but these will always be surrogates for our main interest—namely, chronic liver disease and malignancy. Perhaps the hepatology community should take a lead from screening studies which look at outcomes over a decade or more using ultimate, not surrogate, end points, such as development of cancer or death from cancer.²

The fourth question is can patients safely consume small quantities of alcohol? Modest alcohol consumption has substantial benefits, especially to those with cardiovascular disease. Thus the harm caused by alcohol-induced exacerbation of NAFLD would have to be considerable to offset the benefits of alcohol.

The fifth question, which rides on the previous ones, is who should be managing this condition and in what setting. From

the patient's perspective it is a lottery whether their abnormal blood tests are identified, whether they get further tests, whether they are referred to secondary care and whether they receive a liver biopsy. There is a strong case for rationalising what we do, while accumulating evidence as to whether one approach favours another, taking into account both clinical outcome and costs. Until the evidence base improves, a robust case can be made for managing NAFLD in primary care according to a strict protocol, supported by standardised patient information. Until we do this much effort and money will be wasted with no benefit to patients. A truly patient-focused approach will require close collaboration between general practitioners, hepatologists, gastroenterologists, diabetologists and cardiologists to optimise the clinical pathway and establish shared responsibility for the condition.

Frontline Gastroenterology encourages hepatologists, other subspecialists, the newly formed National

Liver Team and frontline health professionals to work together to provide answers to these difficult questions. *Frontline Gastroenterology* welcomes submissions from clinical teams that demonstrate patient-focused and cost-effective approaches to the management of NAFLD, models of care that can be compared in rigorous long-term studies.

Competing interests None.

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References

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