



# Outpatient management of cirrhosis: moving forward

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Liver disease in the UK was highlighted by the Lancet Commission in 2014<sup>1</sup> as one of the leading causes of premature death, with a rising prevalence and mortality rate, unlike other major causes. This seminal publication was a call to arms to policymakers, public health officials and healthcare workers alike to take action to stem the tide and reverse this trajectory. The most common causes are the steatotic liver diseases of alcohol and the metabolic syndrome-related cirrhosis with their subsequent complications. The evidence for effective outpatient approaches to prevent progression of compensated to decompensated cirrhosis and then to prevent hospital admission is probably a little thin although growing. However, there are many citations in excellent expert-led clinical guidelines such as those published by the British Society of Gastroenterology that outline the evidence for interventions in the complications of cirrhosis, and a growing evidence base for the use of care bundles as toolkits to drive the quality of care in liver disease in the hospital setting. The guidance from Mansour *et al* published in *Frontline Gastroenterology* on the outpatient management of cirrhosis<sup>2-4</sup> draws on this knowledge to provide a pragmatic and practical resource for clinicians which should be well received. The emphasis is on the management of cirrhosis that is common to all causes, and does not touch on disease-specific modifications that may reverse decompensation (e.g. treatment of hepatitis B), which lie more within disease-specific guidelines. There are helpful algorithms for variceal surveillance and osteoporosis management in part one (figures 3 and 4, respectively) and reference tables in part two on encephalopathy (table 1), medication prescribing (table 2) and symptom management (table 3), while part three focuses on special circumstances such as pregnancy and preparing for surgery. The process by which the multidisciplinary working group was convened is not described but it is noted that clinicians practising in both highly specialised and district general hospital services have been involved, as have specialist nurses and other professionals involved in the management of people with cirrhosis. An inclusive

working party is to be commended for many reasons: it is likely that the guidance reflects a consensus of what can be reasonably expected in all healthcare settings and there is recognition that the changing landscape in the clinical workforce means that outpatient services will be delivered by multiprofessional teams. There is extensive referencing of rigorously produced clinical guidelines from a wide variety of recognised sources, and this series of guidance is relevant beyond the boundaries of the UK health system.

There remain controversies in cirrhosis management. Examples include the use of non-invasive criteria such as those outlined in Baveno VI to select the most appropriate people for variceal surveillance<sup>5</sup> and the current debate on the use of non-selective beta-blockers (NSBBs) to prevent decompensation with ascites.<sup>6</sup> Endoscopy is resource-intensive and in a sustainable healthcare setting we should reduce its use where possible. The Baveno VI criteria to select patients for variceal surveillance are included in this guidance with a helpful, easy-to-follow algorithm (part one; figure 3). It depends on access to non-invasive fibrosis assessment by transient elastography, which is now widely although not universally available. With respect to NSBBs, the authors have been clear in stating their current position on their use in the setting of compensated disease to prevent decompensation, preferring to await further evidence and the outcome of clinical trials of their use in early management of varices. Doubtless this will continue to be debated, as with time we may change practice to use these more liberally in the setting of compensated cirrhosis with clinically significant portal hypertension<sup>7</sup> as long as they are well tolerated. Conversely, some advocate for a less liberal use of albumin in the early volume losses during paracentesis, while others for outpatient albumin infusions. Albumin is not without risk.<sup>8</sup> This controversial area of outpatient cirrhosis management has been considered also with a conclusion that further research is needed before any recommendations can be made.

In other aspects of cirrhosis care, it seems likely that a number of strategies will be needed to improve quality and delivery

and thus achieve expected outcomes. For example, the hepatology community has long supported surveillance for hepatocellular carcinoma, and healthcare providers in England and Wales are requested to assess their compliance with National Institute of Health and Care Excellence (NICE) guidance on cirrhosis, yet surveillance decisions are variable, poorly documented and there is a lack of standardised recall procedures highlighted by Cross *et al*<sup>9</sup> and in the Gastroenterology GIRFT Programme.<sup>10</sup> Oncological treatments are becoming more effective and better tolerated, and the evidence base for the effectiveness of surveillance needs constant reassessment through service evaluations. This is now underway as part of National Health Service-England's early cancer detection programme, and is one strategy to drive improvement through policy-making, although reporting is some way off. For now however, we have the strategies of some evidence, clinical guidelines and this practical guide to the selection of suitable candidates.

The inclusion of care bundles for the management of compensated (in part one) and decompensated (in part two) cirrhosis in the outpatient setting is another strategy for improvement. When implemented well, the evidence for their use in other cirrhosis settings is compelling.<sup>11</sup> A further strategy is the inclusion of the patient in clinical decision-making. This requires high-standard patient information, yet it is often neglected, leaving patient support groups and charities to fill in the gaps, which they do so admirably. The guidance emphasises this need and if implemented well should empower patients to be fully conversant in important decisions, be it referral for liver transplantation or supportive care.

Finally, let us not forget that one of the best outpatient interventions we have in our armamentarium for decompensated cirrhosis is day case care for ascites and an increasing knowledge of palliative care approaches. Despite a growing evidence base for this<sup>12</sup> and advocacy of day hospital services by some,<sup>13</sup> there remains undue variation in the provision of such services in the UK.<sup>10</sup> The best practice guidance refers to this as gold standard for refractory ascites care but may have

missed an opportunity to outline some auditable quality service standards such as this and the availability of dietetic expertise in outpatient liver services, as a strategy to drive patient-centred outpatient care.

In 2022, the British Society of Gastroenterology, and the British (BASL), European (EASL) and American (AASLD) Associations for the Study of the Liver published on the negative relationship between climate change and liver disease<sup>14</sup> with a call for sustainable and environmentally responsible service development and research in liver disease. Liver disease affects some of the most economically and socially deprived populations, and our services should be accessible and easy to use for all. This guidance has incorporated strong recommendations on linking outpatient investigations and reviews into one-stop, single-visit services. Innovations in telemedicine and digital medicine, and pathway design for care that is convenient for patients are all underway. Any measure to improve the delivery and quality of gastrohepatology services at earlier stages of disease trajectory helps reduce carbon footprint through prevention of complications and hospitalisation avoidance. Increasing outpatient management of cirrhosis is the way forward. More of this please!

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