

Toward the Effective Co-management of Patients with Cirrhosis by Primary Care Providers and Specialists

Rena K. Fox¹

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The US population suffers from such a progressively high prevalence of many chronic diseases that it is now estimated that over half of all US adults suffer from one or more chronic medical conditions [1]. Cirrhosis is not only one of the most common chronic diseases, its prevalence is rising along with the overall mortality from liver disease, due mostly to preceding hepatitis C virus (HCV) infection, the aging of the hepatitis C-infected baby boomer cohort [2], continually high rates of alcohol abuse, chronic hepatitis B virus (HBV), and the epidemic of obesity and diabetes mellitus to which an estimated 20–40 % of the US population with nonalcoholic fatty liver disease (NAFLD) is attributed [3]. These chronic liver diseases, typically indolent and slowly progressive for decades, are similar to many other common chronic conditions that are largely asymptomatic in their initial phases, such as hypertension and kidney disease. If progression to cirrhosis is reached, the ultimate risk of decompensation and death is very high: It is estimated that 58 % of compensated cirrhosis patients will decompensate within 10 years at a rate of 12 % per year and that the median survival for decompensated patients is 2 years [4]. Currently, in the US, cirrhosis is the twelfth most common cause of death, with the increase in the incidence rate for hepatocellular carcinoma second among any malignancy [5].

Although cirrhosis is a disease of the liver, multiple other organs systems are affected such as the renal, central nervous, cutaneous, gastrointestinal, endocrine, and

immune, necessitating a “whole-patient” approach to comprehensive medical care. With a high frequency of underlying drug and alcohol abuse, patients with cirrhosis also face challenges of addiction, depression and a need for mental health care; furthermore, similar to oncology patients, many patients with cirrhosis may warrant palliative care when their condition progresses to a terminal state. Vaccinations, Mayo End-Stage Liver Disease (MELD) score tracking, hepatocellular carcinoma (HCC) and esophageal varices screening, weight loss and obesity management, fat soluble vitamin replacement, ascites surveillance, diuresis monitoring, spontaneous bacterial peritonitis (SBP) prophylaxis, and preparation for potential liver transplant consideration are only some of the other routine aspects of managing cirrhosis patients.

To be the sole providers for this ideal all-inclusive care for cirrhosis patients, primary care physicians would need to have adequate time, training, support, and coordination, similar to the care for patients with other disease states with vast multisystem components, such as diabetes mellitus. In the diabetic model, generalists have been traditionally trained to manage most if not all aspects of routine care, such that demonstrating standards and achievements in diabetic management is frequently viewed as a marker of overall quality-of-care [6]. Published guidelines, electronic clinical reminders, and even support from payers are in place to support generalists accomplishing all the needs of patients with diabetes. Unfortunately, these systems are not paralleled for supporting generalists caring for patients with cirrhosis. Very few practice guidelines have been published in print or online that address all of the components of cirrhosis management. Clinical practice guidelines exist for the specific treatment of HBV and HCV, alcoholic liver disease, and NAFLD [7–10]—but it is much harder to find guidelines that are designed for either

✉ Rena K. Fox
rena.fox@ucsf.edu

¹ Division of General Internal Medicine, Department of Medicine, University of California, San Francisco, 1545 Divisadero St., Ste 307, San Francisco, CA 94143, USA

generalist or specialist to follow for comprehensive care of cirrhosis patients, regardless of etiology. Of the cirrhosis guidelines that have been published, there is no explicit reference to which aspects of care are in the domain of specialist versus the generalist [11], producing uncertainty that can contribute to frustration or resentment for either type of physician.

While generalists aim to provide prevention, acute care, and chronic disease management for every medical condition that arises in adult patients, primary care providers have neither adequate time nor sufficient expertise to manage all of the aspects of every condition. Referral and co-management with specialists is imperative for the more complex conditions such as cirrhosis, yet the majority of patients with chronic liver disease are managed by primary care providers without specialist consultation. Ideally, the services provided by specialists and generalists are distinct yet complementary. In reality, the practice of co-management can be confusing in the absence of clear delineation of responsibility for each facet of the care. How generalists and specialists divide their contributions may differ by region, and according to local institutional and practice culture. While these issues may have been “shrugged off” in the past, there is now a growing recognition that achieving care coordination among practitioners is an essential component of creating a patient-centered health-care system [6]. Simultaneously, primary care medicine is facing a shortage and a sustainability problem: Existing providers are reporting rising rates of “burnout” [12], the numbers of US graduating medical students entering primary care fields are so low that in 2008, only 2 % intended to practice general internal medicine [13], and fewer specialists are serving as a primary physician for their patients than in the past [14].

In this issue of *Digestive Diseases and Sciences*, Beste et al. [15], in reporting the results of a survey of the perceptions and beliefs of primary care providers regarding the care of cirrhosis patients, highlight these many intertwined issues. Twenty-four primary care providers from 7 Veterans Affairs (VA) facilities in the Pacific Northwest, including community-based and academic facilities, underwent structured qualitative interviews. Three major concepts emerged among the primary care providers. First, since primary care providers perceive patients with cirrhosis as overwhelmingly complex due to the medical and psychiatric care required, the majority believed they lacked expertise to manage all of the aspects of care cirrhosis patients required. Second, they reported that cirrhosis patients themselves needed to contribute more to their own care, in particular focusing on patients making choices about their ongoing drug or alcohol use. Third, the majority believed that cirrhosis should not only be primarily managed by specialists rather than by generalists but

furthermore when specialists consulted with or co-managed cirrhosis patients with generalists, confusion ensued regarding the relative contributions of specialists versus primary care providers toward overall care, with some subjects even expressing resentment regarding the aspects of care specialists delegated to generalists. Though the sample was small, these results can introduce interested parties to some of the less visible, but powerful forces at play in the practice of medicine.

The results of this study come at an especially auspicious time, as a similar controversy regarding generalist versus specialist-guided treatments has emerged regarding HCV treatment. With direct acting antivirals (DAAs), HCV treatment was transformed from dismal and toxic to a treatment typified by high eligibility, great ease of prescribing, few adverse effects, and generally astounding success rates. The new paradigm for HCV treatment immediately prompted the discussion of whether these antiviral regimens can or should be prescribed and monitored by generalists [16], since limiting HCV treatment to specialists erects a barrier to care for most patients, widening many existing disparities in access-to-care. It is not yet apparent whether most generalists are hoping themselves to prescribe HCV treatment, or whether attitudes will resemble those toward providing cirrhosis care.

Beste et al.’s results went beyond the notions of which department should be leading the care of cirrhosis patients. The study extracted some attitudes providers have about their patients with cirrhosis, particularly their opinions about patients who do not change behaviors or habits. As has also been reported with obese subjects [17], the current study suggests that negative feelings about patients who use drugs or alcohol may contribute to physicians’ negative outlook about caring for cirrhosis patients. Unfortunately, patients themselves perceive there is a stigma about having cirrhosis [18]. Identifying where these attitudes exist is a major step in addressing how prejudices may be subtle but may in fact have a forceful effect on how care is provided.

In the current study, we have hints at how generalists perceive cirrhosis patients and the issues of co-management with specialists, but for future study, it would be equally important to study the specialists’ view on cirrhosis patients. We do not yet know how specialists perceive coordinating care with generalists, or how they would want responsibility to be divided between specialists and generalists. Furthermore, we do not yet know whether the treatment of cirrhotic patients is perceived by specialists as it is by primary care practitioners.

In summary, achieving ideal comprehensive care for cirrhosis patients requires time, support, and coordination. The primary care workforce is unlikely to be able to solely manage cirrhotic patients or for that matter all other chronic diseases among adults without consultation and

care coordination with specialists. The implications of the current study are that from the perspective of primary care physicians, cirrhotic patients are challenging to manage, and sensible and rational delineation of care between generalists and specialists is especially needed. With an increasing shortage of primary care physicians and rising numbers of patients with cirrhosis- and liver-related deaths, leaders in primary care and hepatology should consider creating a joint set of guidelines that address how to define the roles of generalists and specialists so that care can be thoroughly and efficiently delivered.

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