No Filters: Bridging the Gap Between Palliative Care and Combined Kidney and Liver Diseases

By Clara Y. Tow, Farhan A. Chowdhury, and Antonio Gabriel D. Corona

An upcoming article "Palliative care in kidney and liver diseases" (1) calls for a greater understanding of the role of palliative care in patients with combined kidney and liver diseases. The devastating cross-organ pathophysiology is invariably associated with poor outcomes, leading to a growing recognition of the need for palliative care in this population. Despite this, there remain challenges in the early integration of palliative care for the interdisciplinary care of these patients. This brief commentary discusses two frequently encountered issues—the difficulty with prognostication and the potential for transplantation—that may preclude timely referrals to palliative care for patients with kidney and liver failure.

Prognostication

While the definition of palliative care has evolved throughout the years, it remains entrenched in facilitating effective communication to determine goals of care (2). This requires accurate prognostication for multiple reasons. First and foremost, it helps medical clinicians recognize the severity of illness that the patient faces and the chances of recovery. This understanding then facilitates patient-centered care and allows for meaningful conversations regarding symptom control and management of end-of-life scenarios.

The most well-recognized predictive model, the model for end stage liver disease (MELD), incorporates international normalized ratio, creatinine, and total bilirubin into a logarithmic formula to predict 90-day mortality and has been used to prioritize patients on the liver transplant waiting list. Since its inception, the MELD score has undergone different iterations to improve mortality prediction and organ allocation. The incorporation of sodium (MELD-Na) better reflected the circulatory dysfunction and spectrum of hepatorenal syndrome manifested in patients with advanced liver disease (3). The most updated version, MELD 3.0, incorporates sex at birth and albumin (4). These variables not only improve survival prediction but more importantly, address sex-based disparities, which for a large part had been attributed to using creatinine as an estimate of glomerular filtration.

Using serum creatinine has been a constant talking point in defining kidney diseases in the setting of cirrhosis. There is realization that prototypes of kidney injury are under-diagnosed in patients with liver disease (5), which is concerning from a prognostication standpoint, as the development of kidney dysfunction is a lynchpin in the detection of cirrhotic decompensation. Literature has emerged supporting the use of cystatin C as a superior estimate of glomerular filtration (6). However, as cystatin C is not routinely available, it has yet to become the new standard.

Because of this, it is vital that palliative care referrals occur as early as possible in the illness trajectory, ideally at the time of diagnosis of cirrhosis. Without more refined and accessible diagnostics to accurately detect kidney diseases, waiting to meet traditional kidney injury criteria may prove to be too late and afford a shorter period for palliative care practitioners to establish rapport and build trust with the patient.

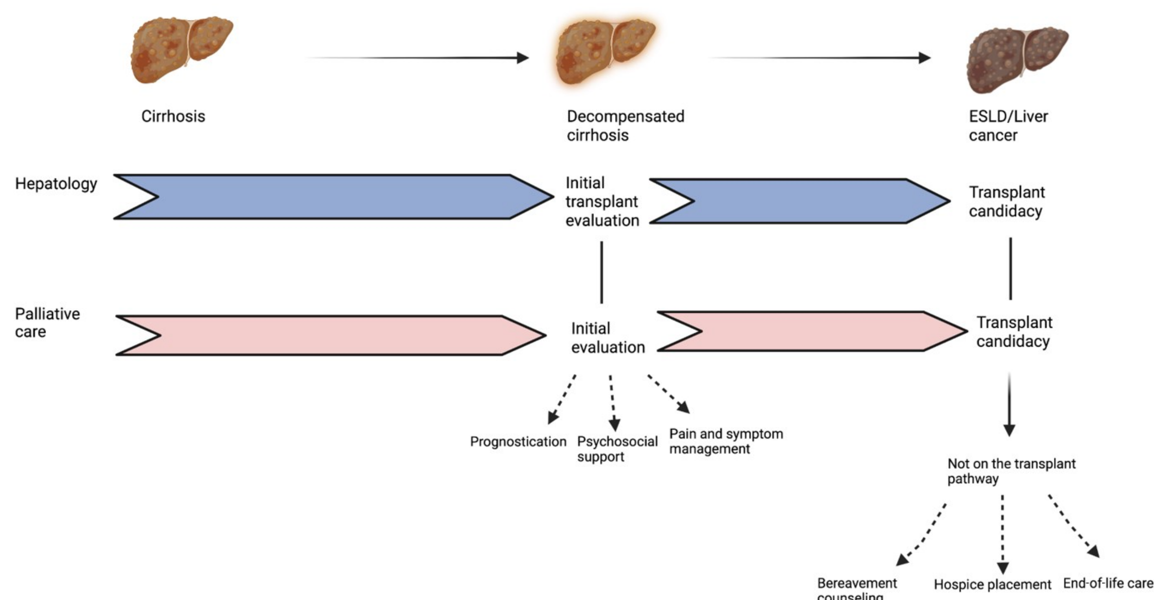
Transplantation

The potential for organ transplantation may also exclude patients from receiving palliative care interventions. Palliative care has a defined and well-accepted role for patients with advanced liver disease who are not on the transplant pathway. For those who are considered for transplantation, this role becomes much more complicated, as candidacy can be fluid and contingent on dynamic patient conditions (Figure 1). For example, it is not uncommon to encounter patients with cirrhosis on the transplant pathway, who suddenly develop acute decompensation, such as kidney failure. Such patients require aggressive medical care, including hemodialysis, to aid in their recovery from their critical condition in the hope of achieving transplant candidacy status. At the same time, it is acknowledged that acute kidney injury requiring dialysis carries a dismal prognosis (7). In these situations, the presence of kidney diseases, which is a defining event for the diagnosis of end stage liver disease, can be the factor that triggers the transplant pathway or the same factor that hinders transplant candidacy because of clinical deterioration. Consequently, the decision to offer dialytic therapies can be difficult to make given the uncertainties that surround these rapidly shifting landscapes.

For patients with advanced liver disease, especially those with concomitant kidney failure, palliative care should be available to them as early as possible in the disease process. They should receive symptom relief that balances quality and quantity of life, and they should have support systems in place if organ transplantation is ultimately not feasible. Transplant teams, historically, have not integrated palliative care into transplant practices, leaving a widening gap in patient care (8). Education and awareness as to how palliative care can collaborate with transplant teams are necessary to promote the physical and emotional well-being of this patient population that is extremely debilitated and unique.

As our understanding of diseases grows, so should our understanding of our patients' needs. Recognizing that the presence of kidney dysfunction in liver disease may herald a precarious disease course, often culminating in mortality, palliative care should be involved as early as the diagnosis is made and throughout the patient's clinical course, collectively and cooperatively, with organ transplant teams.

Figure 1. Palliative care integration with the transplant pathway



The temporal relationship of palliative care with the transplant pathway. Transplant evaluation usually begins at the time of cirrhosis decompensation, liver cancer, or a MELD 15 score. Palliative care referrals can be done concomitantly. Integrating palliative care early, once liver cirrhosis is diagnosed, can build a longitudinal relationship with patients. If transplantation is not deemed to be a safe option, this relationship can culminate in instituting hospice care, bereavement counseling, and services that are in line with patients' end-of-life wishes. ESLD, end stage liver disease. Images from Biorender.

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