Palliative care in cirrhotic patients: Brief summary of recent AASLD guidance

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Abstract
Palliative care in decompensated cirrhotic patients is a developing concept which should be used in cirrhotic patients during the advanced and terminal stages. Hepatologists and liver transplant teams mostly ignore the patients palliative care issues while intensively dealing with the liver diseases and its complications. This review is a brief summary of the recently published guidance discussing the palliative care, symptom based treatments and end of life with a collaborative and standaritized approach which is recommended to all health care workers of cirrhotic patients.

Keywords: AASLD guidance; decompansated cirrhosis; palliative care.

Introduction
Palliative care (PC) is specialized medical care for people living with serious illnesses. It aims to enhance the current care of patients, focusing on the quality of life through a multidisciplinary approach.[1] PC of decompensated cirrhotic patients (DCP) is a recently developing era, which includes concerns about the physical, spiritual, and psychological needs of patients. A new American Association for the Study of Liver Diseases (AASLD) article about PC in decompensated cirrhosis, since having fewer randomized controlled trials defined as guidance, has been published in Hepatology.[2] Hereby, I would like to summarize this guidance for the followers of Hepatology Forum to make them focus on the new concepts of PC for cirrhotic patients.

How, When, and by Whom PC Can Be Applied to DCP?
Cirrhotic patients have multiple physical, cognitive, psychological, economic, and social problems that are usually underrecognized by caregivers, hepatologists, and transplant teams. Since there is a variable prognosis for DCP with probability of a curable treatment such as liver transplantation, PC is frequently not involved in the treatment of these patients though only a small percentage of these patients have the chance of cure. Only 11% of the patients have a PC approach in the USA, and consultations are made very late in the disease course.[3] However, it should be noted that PC does not prevent the delivery of curative treatments and liver transplantation. Therefore, at any stage of the illness, PC care can be given by either primary or specialized care teams. Primary PC focuses on basic principles such as communication-based symptom management, which can be provided by any medical professional.[2] However, for more complex cases, subspecialty trained teams are necessary, which include PC physicians, PC certified nurses, social workers, pharmacists, and chaplains. The USA National PC consensus committee determined eight domains for providing a good PC, including physical, psychological, social, spiritual, cultural, and ethical/legal issues. The priority of these domains can be changed according to the needs and conditions of the patients.[4]

Palliative care is mostly given at patients’ homes or hospitals if the patient is hospitalized. Hospices are inpatient clinics that provide comfort to patients at the end of their life, which are different from PC. The hospice benefit is provided only to patients who have a limited prognosis, that is, less than 6 months, which is determined by two expert physicians. MELD or Child-Pugh score can be used to determine the life expectancy, and cirrhotic patients who have less than 6-month survival can benefit from hospice care. However, it should be noted that survival expectancy can be changed due to factors that may provoke acute on chronic liver failure. The other important issue is the caregivers’ and family members’ situation who can have psychological, physical, and financial burdens. The other important factor is chronic alcohol and/or drug usage and its long-term physical, social, and economic effects. On the other hand patients’ symptoms may also include stress, anxiety, depression, insomnia, and decreased health-related quality of life (HRQoL). This AASLD guidance focuses on these problems and possible solutions, which will interest caregivers. This guidance also recommends providing critical support to primary caregivers and family members. These supports can be spiritual, mental health resources, bereavement support, grief counseling, caregiver support websites, and peer support groups.[2] However, due to the lack of professional support teams, absence of evidence-based criteria, and stigma that PC means giving up, most of these issues are recovered by hepatology teams. This PC of DCP guidance points out the importance of the care and support of caregivers during the course of the disease and after the death of the patient.[2]

How Can Advanced Care Planning Be Performed in Cirrhosis?
When a life-limiting disease is diagnosed, advanced care planning (ACP), which includes explaining the disease process and making a decision about the health care preferences, goals, and values, should be provided to the patient and the family. This is a proactive, ongoing, and collabora-
ative process that requires good communication between the patient and the caregivers. Besides ACP includes a step-by-step approach by evaluating decision-making capacity, determining family members, goals of the conversation, getting permission, disease understanding, providing prognostic information, exploring values, document preferences, and repeating the conversation regularly. Additionally, ACP may include financial burdens, unmet psychosocial needs, and involvement of chaplaincy, spiritual, or pastoral care from the hospital or community. In the AASLD guidance the expert panel recommends that advanced directives should be completed early in the course of cirrhosis before the decompensation.

**Symptomatic Treatment of DCP**

Chronic longtime complaints such as pain, breathlessness, muscle cramps, pruritus, sleep disturbances, daytime sleepiness, and sexual dysfunction frequently impair the patients’ HRQoL, decrease the motivation for the treatment, and sometimes provoke depression and suicide attempts. Symptomatic treatment not only improves the patients’ HRQoL but also increases survival by motivating the patients’ adherence to treatment. For the symptomatic approach, physical therapy, cognitive behavioral therapy, and pharmacologic treatment can be used together. However, first, nonpharmacological treatments can be initiated if available. Nevertheless, pharmacologic treatment can be challenging in patients with cirrhosis due to impaired drug metabolism, and therefore a conservative approach (start low, go slow) is generally recommended. All possible symptom-based treatments are discussed in this guidance which includes pharmacotheraphy and other treatments. Below, some symptomatic treatments are summarized with the authors’ recommendations.

**Some Symptom-Based Statements in the Guidance**

**A. Muscle cramps**
- a. Check serum electrolyte levels and replace potassium, magnesium, and zinc as the first step.
- b. Taurine (2–3 g daily), vitamin E (200 mg three times a day), or baclofen (5–10 mg three times a day) has preliminary supportive data and can be considered.

**B. Sleep disturbances**
- a. Find out any other underlying reasons such as hepatic encephalopathy, depression, pruritus, obstructive sleep apnea syndrome, restless leg syndrome.
- b. Evaluate physical activity, meal, and medication times.
- c. Stress reduction achievements such as meditation, cognitive behavioral approaches.
- d. Short-term melatonin 3 mg or hydroxyzine 25 mg at night time in child A or B patients.
- e. Although benzodiazepines should be avoided, at the end of life, it should be considered, to decrease anxiety.

**C. Fatigue**
- a. Evaluate all possible factors other than cirrhosis itself with multidisciplinary approach. There are no clear data on the use of stimulants in cirrhotic patients.

**D. Pruritus**
- a. Initially, general measures can be used, such as moisturizing creams, avoiding hot baths and harsh soaps, wearing loose-fitting clothes, and cool humidified air.
- b. Antihistamines such as diphenhydramine and hydroxyzine can be used, especially if the patient has sleeping disturbances. For cholestasis-associated pruritus, cholestyramine, short-term use of rifampicin, or naltrexone or serotonin reuptake inhibitors can be used.

**E. Sexual dysfunction**
- a. Approximately, 70% of men and 80% of women suffer from sexual dysfunction during the decompensated period of cirrhosis, which leads to impaired HRQoL.
- b. Asking about sexual satisfaction is the first step in the treatment because this is the least discussed symptom with the patient.
- c. The first approach is evaluating the drugs/substances, such as beta-blockers or alcohol and tobacco use, and conditions, such as depression and anxiety. Although there is not enough data, tadalafil may be a short-term option in selected men. However, there are no data on women regarding sexual dysfunction.

**F. Depression and anxiety**
- a. Depression and anxiety are common in cirrhotic patients between the rates of 30% and 60%, which causes impaired HRQoL and suicide.
- b. Organic causes such as vitamin deficiency, chronic encephalopathy, and dementia should be evaluated first.
- c. Then, patients can be referred to a mental health professional with the collaboration to receive behavioral and/or pharmacological treatment.

**G. Nausea and vomiting**
- a. Half of the cirrhotic patients experience nausea probably related to medications, adrenal insufficiency, electrolyte imbalances, uremia, gastroesophageal reflux, constipation, gastroparesis, or increased intra-abdominal pressure due to ascites. Therefore, causative factors should be evaluated and treated primarily in cirrhotic patients who have nausea and vomiting.
- b. As for the medication, if the patient has reflux or dyspeptic symptoms, H2 antagonist or proton pump inhibitor trial can be used first. However, if there is no response or no other gastrointestinal symptoms other than nausea and/or vomiting, further medication can be a serotonin 5-HT3 antagonist, ondansetron up to 8 mg/day, which requires monitoring for QTc prolongation and constipation.

**Conclusion**

Most of the hepatologists dealing with the care of the DCP only focus on the liver disease per se; however, it should be noted that there are many needs for the patient and family members to increase HRQoL and the conditions during the end of life period. In this regard, this guidance helps the clinicians by providing standardized information for the PC of DCP, which I highly recommend.

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References

1. Sepúlveda C, Marlin A, Yoshida T, Ullrich A. Palliative care: the World Health Organization’s global perspective. J Pain Symptom Manage 2002;24(2):91-96. [CrossRef]

2. Rogal SS, Hansen I, Patel A, Ufere NN, Verma M, Woodrell CD, et al. AASLD Practice Guidance: Palliative care and symptom-based management in decompensated cirrhosis. Hepatology 2022;76(3):819-853. [CrossRef]

3. Beck KR, Pantilat SZ, O’Riordan DL, Peters MG. Use of palliative care consultation for patients with end-stage liver disease: survey of liver transplant service providers. J Palliat Med 2016;19(8):836-841. [CrossRef]

4. Ferrell BR, Twaddle ML, Melnick A, Meier DE. National consensus project clinical practice guidelines for quality palliative care guidelines, 4th Edition. J Palliat Med 2018;21(12):1684-1689. [CrossRef]

5. Klein J, Tran S-N, Mentha-Dugerdil A, Giostra E, Majno P, Morard I, et al. Assessment of sexual function and conjugal satisfaction prior to and after liver transplantation. Ann Transplant 2013;18:136-145. [CrossRef]

6. Thakur J, Rathi S, Grover S, Chopra M, Agrawal S, Taneja S, et al. Tadalafil, a phosphodiesterase-5 inhibitor, improves erectile dysfunction in patients with liver cirrhosis. J Clin Exp Hepatol 2019;9(3):312-317. [CrossRef]

7. Peng JK, Hepgul N, Higginson IJ, Gao W. Symptom prevalence and quality of life of patients with end-stage liver disease: a systematic review and meta-analysis. Palliat Med 2019;33(1):24-36. [CrossRef]