PALLIATIVE CARE IN
END-STAGE LIVER DISEASE

Ken S. Ota, DO
Family Medicine
Banner Good Samaritan Medical Medical Center

Learning Objectives:
- Describe the common bio-psycho-social issues in end-stage liver disease (ESLD).
- Discuss the trajectory of functional decline in patients with ESLD.
- Coordinate palliative treatments for common physical symptoms experienced by patients with ESLD.
- Communicate the role of palliative care in ESLD.

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Palliative Care in End-Stage Liver Disease

Ken S. Ota, DO
Transitional Care Medicine
Banner Good Samaritan Medical Center
Phoenix, AZ

WHY?

Not eligible for transplant, too sick for life.

What is Palliative Care?

“…an approach that improves the quality of life of patients and their families facing the problem associated with life-threatening illness, through the prevention and relief of suffering by means of early identification and impeccable assessment and treatment of pain and other problems, physical, psychosocial and spiritual.”

W.H.O. Definition of Palliative Care. www.who.int
Objectives

- Describe the common bio-psycho-social issues in patients with ESLD
- Discuss the trajectory of functional decline in ESLD
- Coordinate palliative treatments for common physical symptoms in ESLD
- Communicate the role of palliative care in ESLD

Not Enough Donor Livers

MELD Score for prognosis
End-Stage Liver Disease

Cirrhosis with Renal Dysfunction and Hyponatremia

Hansen L, et al. 2010

Background

• 5.5 million Americans with chronic liver disease
• Various etiologies: infectious, autoimmune, metabolic
• ~30,000 deaths annually
• Transplant listed patients > Liver donors
• Asymptomatic for years
• $4 billion healthcare costs
• 37% readmit to hospital within 1 month

Biological Issues

• Ascites
• Bleeding due to Portal Hypertension
• Spontaneous Bacterial Peritonitis
• Hepatic Encephalopathy
• Malnutrition
• Renal Dysfunction
• Hepatocellular Carcinoma
• Pruritus
• Pain
Ascites

- Sodium restriction
- Diuretics (i.e. spironolactone/furosemide)
- Therapeutic Paracentesis
- Peritoneal tunneled catheter (Tapping CR, et al. 2012, observational study)

Hepatic Encephalopathy

- Protein restricted diet not advisable (Kusek, et al. 2008)
- Non-absorbable antibiotic (rifaximin) + lactulose synergy (Loguercio C, et al. 2003, RCT)
- Lactulose enema at home (Saito T, et al. 2002)

Pain

- Acetaminophen (1.5 g to 2 g/day, Ikeda H 2009)
- Avoid NSAIDs
- Non-pharmacologic therapy (CBT, gentle massage, reflexology)

<table>
<thead>
<tr>
<th>Drug (Opioid)</th>
<th>Oral route</th>
<th>Parenteral route</th>
<th>Injection route</th>
</tr>
</thead>
<tbody>
<tr>
<td>Morphine</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Hydromorphone</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Fentanyl</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Oxycodon</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

Table 2: Use of Opioids in Patients with Renal or Hepatic Dysfunction


Prevent/Treat Constipation
Observational retrospective study of ESLD patients

<table>
<thead>
<tr>
<th>Table 4. Demographic Characteristics of 132 Palliative Care Patients: Declined or Declared for LT</th>
<th>Table 5. Outcomes in 132 Palliative Care Patients: Declined for LT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td>M</td>
</tr>
<tr>
<td>Male</td>
<td>66 (94%)</td>
</tr>
<tr>
<td>Age (mean)</td>
<td>66 (94%)</td>
</tr>
<tr>
<td>White</td>
<td>100 (132)</td>
</tr>
<tr>
<td>Hispanic</td>
<td>2 (3)</td>
</tr>
<tr>
<td>African American</td>
<td>2 (3)</td>
</tr>
<tr>
<td>Education</td>
<td>18 (25)</td>
</tr>
<tr>
<td>Income (median)</td>
<td>$50,000</td>
</tr>
<tr>
<td>Employment status</td>
<td>12 (16)</td>
</tr>
<tr>
<td>Marital status</td>
<td>10 (14)</td>
</tr>
<tr>
<td>Hepatitis-related illness</td>
<td>30 (41)</td>
</tr>
<tr>
<td>Comorbidity (diabetes, heart disease)</td>
<td>15 (20)</td>
</tr>
<tr>
<td>Cause of death</td>
<td>12 (16)</td>
</tr>
<tr>
<td>LT assessment to death (days)</td>
<td>60 (82)</td>
</tr>
<tr>
<td>Date of occurrence of LT assessment (months)</td>
<td>12 (16)</td>
</tr>
</tbody>
</table>

*Poonja et al. 2014*

Social Issues

- Patients with cirrhosis lack self-management of disease knowledge. (Volk et al. 2013)
- Many patients with ESLD/Cirrhosis feel stigmatized. (Vaughn-Sandler et al. 2014)

Psychological Issues

- Illness-related fear in ESLD is prevalent. (Stewart KE et al. 2013)
**RESEARCH**

Impact of community based, specialist palliative care teams on hospitalisations and emergency department visits late in life and hospital deaths: a pooled analysis

Conclusions Community based specialist palliative care teams, despite variation in team composition and geography, were effective at reducing acute care use and hospital deaths at the end of life.
Summary

• Bio-Psycho-Social Care
• Disease trajectory can be unpredictable
• Palliative care is appropriate at any stage of a life-threatening illness
• Keep lines of communication open and prepare for the worst

“...the moral test...how [we] treat those who are in the shadows of life...”