Palliative Care for the Hematology Patient

Thomas W. LeBlanc, MD, MA, MHS, FAAHPM
Associate Professor of Medicine
Division of Hematologic Malignancies

Director, Cancer Patient Experience Research Program (CPEP)
Disclosures

• I am currently, or have recently been, a consultant for AstraZeneca, CareVive, Flatiron, Helsinn, Otsuka, Pfizer, and Seattle Genetics

• I have served on recent advisory boards for AbbVie, Agios, Amgen, Heron, Medtronic, and Otsuka

• I have received honoraria from Celgene, for non-branded speaking engagements

• I have received recent research funding from the American Cancer Society, AstraZeneca, Duke University, the National Institute of Nursing Research / National Institutes of Health, and Seattle Genetics
Outline

• Case

• Palliative Care: a 21st Century Definition

• Palliative care needs in hematologic malignancies

• Data on integrated care, and outcomes
DOES JEAN NEED PALLIATIVE CARE?
WHAT IS PALLIATIVE CARE?
...SPECIALIZED MEDICAL CARE FOR PEOPLE FACING A SERIOUS ILLNESS

CAPC.org definition
...FOCUSES ON PROVIDING PATIENTS WITH RELIEF FROM THE SYMPTOMS AND STRESS OF A SERIOUS ILLNESS

CAPC.org definition
...GOAL IS TO IMPROVE QUALITY OF LIFE FOR THE PATIENT AND FAMILY

CAPC.org definition
...PROVIDED BY A SPECIALLY-TRAINED TEAM OF DOCTORS, NURSES, AND OTHER SPECIALISTS WHO WORK TOGETHER WITH A PATIENT’S OTHER DOCTORS TO PROVIDE AN EXTRA LAYER OF SUPPORT

CAPC.org definition
...IT IS APPROPRIATE AT ANY AGE AND AT ANY STAGE IN A SERIOUS ILLNESS AND CAN BE PROVIDED ALONG WITH CURATIVE TREATMENT

CAPC.org definition
Palliative Care

End-of-life Care

Hospice Care
WHO PROVIDES IT?
The Workforce

ABMS recognized “hospice and palliative medicine” as a board certified subspecialty in 2006

– > 7,000 boarded specialists in the US
  • > 100 fellowship training programs
  • Fellowship training required since 2013 (1 year)

>90% of US hospitals >300 beds have palliative care

Most palliative care for cancer patients is provided by their cancer care team
Primary vs. Specialty Palliative Care

Primary palliative care:
- Pain management
- CINV prevention/tx
- Symptom mgt
- Psychological support
- Prognostic discussions, goals of care

Specialty palliative care:
- Complex, refractory symptoms
- Persistent distress, coping
- Complex communication, poor understanding of prognosis
- Advance directives, legacy planning
- Family/caregiver support

Quill TE and Abernethy AP. "Generalist plus specialist palliative care – creating a more sustainable model." NEJM, 2013
WHAT DO PALLIATIVE CARE SPECIALISTS DO?
Core Competencies

- Symptom management
  - Complex/refractory symptom management
- Communication
  - Difficult communication / conflict resolution
  - Facilitating prognostic understanding; aid in decisions
- Psychosocial distress assessment and management
- Spiritual assessment and support
- Family and caregiver care
- End-of-life care (including hospice)
Different Focus

Patients talk about different things with their oncologist than they do with their palliative care specialist

Three primary foci of palliative care visits in oncology:

1. Symptom management
2. Engaging patients in emotional work
3. Serving as communication bridge

*this should not replace the “primary palliative care” that most of us already provide

WHAT ARE THE PALLIATIVE AND END-OF-LIFE CARE NEEDS OF HEMATOLOGY PATIENTS?
54%
81%
39%
43%
57,230

40,610
Unmet End-of-Life Needs in Hematologic Malignancies

ER visits: 43% (Heme-malignancy), 54% (Solid tumors)
Hospital admission: 47% (Heme-malignancy), 47% (Solid tumors)
Hospital death: 16% (Heme-malignancy), 16% (Solid tumors)
ICU admission: 39% (Heme-malignancy), 39% (Solid tumors)
ICU death: 33% (Heme-malignancy), 4% (Solid tumors)
Chemo use: 43% (Heme-malignancy), 14% (Solid tumors)

All p-values < 0.001

Burden of Care in AML

Health care use:
- Percent life in hospital: 28%
- Percent life in clinic: 14%
- Percent life outside hospital or clinic: 58%

Place of death:
- Home without hospice: 61%
- Facility or hospice home: 22%
- Hospital: 17%

- Median hospitalizations = 4.2
- ICU admissions = 31.7%
- Palliative care consult = 16.2%
- Hospice utilization = 22%

El-Jawahri, Cancer 2015
Outcomes: The “Quality Measures” Gap

Patients with blood cancers are more likely to: \(^1,2\)
- receive chemotherapy in the last 14 days of life
- spend time in an ICU in the last 30 days of life

Patients with blood cancers are less likely to:
- access consultative palliative care services\(^3\)
- use hospice services\(^4\)
  - Or, are more likely to die within 7 days of enrollment, or within 24 hrs of enrollment \(^5\)
  - Median LOS of 11 days, vs. 19 for solid tumors \(^5\)

Unmet Symptom Needs in Hematologic Malignancies

- Feeling nervous: 33%
- Irritable: 36%
- Feeling sad: 41%
- Feeling worried: 50%

Symptom Burden

What the literature tells us…

1. Unique barriers to EOL care
2. Clinicians are different
3. Hospice doesn’t work well in hematology
#1 – Blood Cancers are Different

Remarkable prognostic heterogeneity (uncertainty)
- Some entirely curable with chemotherapy
- Others more like chronic, indolent diseases;
  - More likely to die of something else

Some confer a dismal prognosis, yet cure remains possible
- When curative-intent treatments do not work, much misery may result
  - Sometimes almost kill to cure

LeBlanc TW, JOP 2014
#2 – Unique Barriers to EOL Care

Identifying the end-of-life phase is more difficult\(^1\)

Survey data on heme docs perspectives about barriers to EOL care:\(^2\)

- Unrealistic patient expectations (97.3%)
- Clinician concern about taking away hope (71.3%)
- Unrealistic clinician expectations (59%)

---

Illness Understanding – AML

Figure 3. Patients’ and oncologists’ perceptions of the likelihood of cure of leukemia.

El-Jawahri, The Oncologist, 2018
Illness Understanding – AML

Figure 4. Patients’ and oncologists’ perceptions of the likelihood of cure. (A): Perceptions among those receiving intensive chemotherapy. (B): Perceptions among those receiving non-intensive chemotherapy.

El-Jawahri, The Oncologist, 2018
**Illness Understanding – AML**

**Figure 2.** Patients’ and oncologists’ perceptions of the risk of treatment-related mortality. Abbreviation: TRM, treatment-related mortality.
The Doctors are Different

Survey of 120 hematologic and 120 solid tumor oncologists at MD Anderson Cancer Center (Texas)

Hematologic malignancy specialists are more likely to:

– Favor systemic therapy with moderate toxicity and no survival benefit
– Have a sense of failure with dz progression

…And are less comfortable discussing:

– death and dying
– Hospice referral

The Doctors are Different

3 tertiary centers w/ established PC programs
  – Surveys and semi-structured interviews to better understand barriers to PC referral
  – 66 interviewees; 23 heme, 43 solid tumor

Most blood cancer specialists viewed palliative care as just end-of-life care, or hospice

Frequent concerns about philosophical issues:
  • non-palliative goals, not wanting another clinician to intrude on the patient-doctor relationship, etc.

#3 – Hospice Care and Transfusions

National survey study of 349 hematologic oncologists

Key messages:

– Hospice care is helpful overall (68.1%)
– Home hospice care is inadequate for blood cancer patients’ needs (46%)

>50% said they would be more likely to refer patients to hospice if transfusions were more available

Hospice Use in Leukemias

Figure 2. Trends in transfusion dependence and hospice use. The panels illustrate proportions of patients who were transfusion dependent at the time of death (A), who were enrolled in hospice at the time of death (B), and in median duration of hospice stay (C). The P values and CIs were calculated from generalized linear regression (A-B) or quantile regression (C).

LeBlanc, TW et al. Blood 2018
EOL Quality Measures in Leukemias

Figure 3. Indicators of EOL care quality among Medicare beneficiaries with leukemia, stratified by transfusion dependence and use of hospice at the end of life. (A) Proportions of patients dying in the inpatient setting, with an ICU admission in the last 30 days of life, or with chemotherapy administration in the last 14 days of life. (B) Median Medicare spending in the last 30 days of life (error bars indicate IQR).

LeBlanc, TW et al. *Blood* 2018
DOES PALLIATIVE CARE WORK IN HEMATOLOGY?
Figure 2. Elements of palliative care (PC) vs oncologic care visits at clinical turning points. EOL indicates end of life.

Yoong JAMA IM 17(34) 2013
Integrated Palliative Care Studies in Oncology

At least 8 randomized controlled trials:
- Bakitas et al, JAMA 2009, ENABLE II study
- Temel et al, NEJM 2010
- Zimmerman et al, Lancet 2014
- Bakitas et al, JCO 2015, ENABLE III study
- Grudzen et al, JAMA Oncology 2016
- Temel et al, JCO 2016
- El-Jawahri et al, JAMA 2016, SHIELD study
- Vanbutsele et al, Lancet Onc 2018

Many patient-centered outcome improvements
- Starting to see long-term and caregiver outcomes improve

No study has shown harm
Improved outcomes in these studies

- Quality of life
- Symptom management
- Mood/depression
- Prognostic understanding
- Caregiver outcomes
- Utilization/costs
- Satisfaction
- End-of-life outcomes
- Survival
Professional Society Recommendations

American Society of Clinical Oncology
- “any patient with metastatic cancer and/or high symptom burden”

American College of Surgeons, Commission on Cancer
- Accredited programs “required to offer palliative care either on site or by referral”

National Comprehensive Cancer Network
- “Institutions should develop processes for integrating palliative care into cancer care, both as part of usual oncology care and for patients with specialty palliative care needs”

Oncology Nursing Society
- “All patients with cancer benefit from palliative care”
- “Palliative care should begin at time of diagnosis”

ONS Position Statement: Palliative Care for People With Cancer: https://www.ons.org/advocacy-policy/positions/practice/palliative-care
Randomized Trial of Inpatient Palliative Care Intervention for Patients Hospitalized for Hematopoietic Stem Cell Transplantation (HCT)

Areej El-Jawahri, Thomas LeBlanc, Harry VanDusen, Lara Traeger, Joseph Greer, William Pirl, Vicki Jackson, Jason Telles, Alison Rhodes, Thomas Spitzer, Steven McAfee, Yi-Bin Chen, Stephanie Lee, Jennifer Temel
Study Design

160 patients with hematologic malignancies within 72 hour of admission for HCT (and their willing family caregivers)

**RANDOMIZED**

Inpatient Integrated Palliative and Transplant Care
- At least 2 visits weekly during HCT hospitalization.

Transplant Care Alone
- Palliative care consult upon request.

Longitudinal data collection
- Week 2 (primary)
- Three & six months post HCT
Assessed for eligibility N=242

Enrolled and Randomized N=160 (86%)

Ineligible (N = 56)
Eligible but refused N= 26
- Dislike survey (N = 10)
- Too anxious (N = 5)
- Concerned about logistics (N = 5)
- No reason (N = 5)

Transplant care (N = 79)

Inpatient palliative care (N =81)

Week-2 assessment
Completed N=77 (97.5%)

3-month assessment
Completed N=74 (93.7%)

Week-2 assessment
Completed N=80 (98.8%)

3-month assessment
Completed N=75 (92.6%)
Patient QOL

Δ FACT-BMT: -14.7 vs. -21.5

*P = 0.04*, Cohen’s *d = 2.9*
Patient Symptom Burden

Δ ESAS: 17.3 vs. 23.1

P = 0.03, Cohen’s d = 0.4
Patient Mood

**Patient HADS - Depression**

- Δ HADS-D: 2.4 vs. 3.9, \( P = 0.02 \), Cohen’s d = 0.4

**Patient HADS - Anxiety**

- Δ HADS-A: -0.8 vs. 1.1, \( P = 0.0006 \), Cohen’s d = 0.6
## Week-2 Outcomes

<table>
<thead>
<tr>
<th>Week-2 Outcomes</th>
<th>Adjusted mean difference</th>
<th>95% CI</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>FACT – BMT (primary outcome)</td>
<td>7.73</td>
<td>1.27 to 14.19</td>
<td>0.019</td>
</tr>
<tr>
<td>FACT – Fatigue</td>
<td>3.88</td>
<td>0.21 to 7.54</td>
<td>0.038</td>
</tr>
<tr>
<td>ESAS – Symptom burden</td>
<td>-6.26</td>
<td>-11.46 to -1.05</td>
<td>0.019</td>
</tr>
<tr>
<td>HADS – Depression symptoms</td>
<td>-1.74</td>
<td>-3.01 to -0.47</td>
<td>0.008</td>
</tr>
<tr>
<td>HADS – Anxiety symptoms</td>
<td>-2.26</td>
<td>-3.22 to -1.29</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>PHQ-9 – Depression</td>
<td>-1.28</td>
<td>-2.82 to 0.27</td>
<td>0.104</td>
</tr>
</tbody>
</table>
## 3 Month Outcomes

<table>
<thead>
<tr>
<th>3 Month Outcomes</th>
<th>Adjusted mean difference</th>
<th>95%CI</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>FACT – BMT</td>
<td>5.34</td>
<td>0.04 to 10.65</td>
<td>0.048</td>
</tr>
<tr>
<td>FACT – Fatigue</td>
<td>2.00</td>
<td>-1.08 to 5.09</td>
<td>0.202</td>
</tr>
<tr>
<td>ESAS – Symptom burden</td>
<td>-2.44</td>
<td>-6.29 to 1.41</td>
<td>0.212</td>
</tr>
<tr>
<td>HADS – Depression symptoms</td>
<td>-1.70</td>
<td>-2.75 to -0.65</td>
<td>0.002</td>
</tr>
<tr>
<td>HADS – Anxiety symptoms</td>
<td>-0.76</td>
<td>-1.73 to 0.23</td>
<td>0.130</td>
</tr>
<tr>
<td>PHQ-9 – Depression</td>
<td>-2.12</td>
<td>-3.42 to -0.814</td>
<td>0.002</td>
</tr>
<tr>
<td>PCL – PTSD symptoms</td>
<td>-4.35</td>
<td>-7.12 to -1.58</td>
<td>0.002</td>
</tr>
</tbody>
</table>
### 6-Month Outcomes

<table>
<thead>
<tr>
<th>6 Month Outcomes</th>
<th>Adjusted Mean Difference</th>
<th>95% CI</th>
<th>P- Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>FACT – BMT</td>
<td>2.72</td>
<td>-2.96 to 8.39</td>
<td>0.346</td>
</tr>
<tr>
<td>FACT – Fatigue</td>
<td>0.10</td>
<td>-3.38 to 3.58</td>
<td>.957</td>
</tr>
<tr>
<td>HADS – Depression</td>
<td>-1.21</td>
<td>-2.26 to -0.16</td>
<td><strong>0.024</strong></td>
</tr>
<tr>
<td>HADS – Anxiety symptoms</td>
<td>-0.61</td>
<td>-1.69 to 0.47</td>
<td>0.267</td>
</tr>
<tr>
<td>PHQ-9 – Depression</td>
<td>-1.63</td>
<td>-3.08 to -0.19</td>
<td><strong>0.027</strong></td>
</tr>
<tr>
<td>PCL – PTSD Symptoms</td>
<td>-4.02</td>
<td>-7.18 to -0.86</td>
<td><strong>0.013</strong></td>
</tr>
</tbody>
</table>
Psychological Distress at 6-Months

P = 0.010

P = 0.0017

P = 0.029
## Caregiver Outcomes

<table>
<thead>
<tr>
<th>2-week Caregiver Outcomes</th>
<th>Adjusted mean difference</th>
<th>95% CI</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>HADS-Depression</td>
<td>-1.65</td>
<td>-3.01 to -0.29</td>
<td><strong>0.018</strong></td>
</tr>
<tr>
<td>HADS-Anxiety</td>
<td>-0.14</td>
<td>-1.56 to 1.27</td>
<td>0.84</td>
</tr>
<tr>
<td>QOL</td>
<td>3.38</td>
<td>-1.59 to 8.35</td>
<td>0.180</td>
</tr>
</tbody>
</table>

**Improvement in two domains of QOL**
- **Coping**: adjusted mean difference = 1.01, \( P = 0.009 \)
- **Administrative/finances**: adjusted mean difference = 0.67, \( P = 0.029 \)
<table>
<thead>
<tr>
<th>Topic</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Symptoms</td>
<td>88.9%</td>
</tr>
<tr>
<td>Rapport building</td>
<td>98.8%</td>
</tr>
<tr>
<td>Coping</td>
<td>85.2%</td>
</tr>
<tr>
<td>Illness understanding</td>
<td>12.3%</td>
</tr>
<tr>
<td>Treatment decision-making</td>
<td>2.5%</td>
</tr>
<tr>
<td>Advance care planning</td>
<td>2.5%</td>
</tr>
</tbody>
</table>
Initial Visit Symptoms Addressed

- Pain: 65.4%
- Nausea: 67.9%
- Diarrhea: 53.1%
- Constipation: 55.6%
- Insomnia: 33.3%
- Fatigue: 38.3%
- Depression: 11.1%
- Anxiety: 33.3%
Summary

Palliative care provides an extra layer of support to patients with hematologic malignancies (and caregivers).

Integrated palliative care improves patient-centered outcomes.

More research is needed to test and optimize the impact of palliative care in various hematologic malignancy populations.
QUESTIONS AND DISCUSSION