Update on Palliative Care Interventions for Patients with Hematologic Malignancies

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Objectives

• Describe disparities in palliative care for patients with hematologic malignancies.
• Discuss practice changing clinical trials for integrating PC and Heme Malignancy care.
• Describe future research needs for hematologic malignancies care.
Disclosures

- Funding:
  - PCORI
- Honoraria:
  - AAHPM
- Investments:
  - None
Palliative Care Needs of Patients with Blood Cancers
Why Early PC for Blood Cancers?

• Studies have demonstrated the benefits of early integration of specialty PC for patients with solid tumors\(^1\)

• Despite immense PC needs, patients with hematologic malignancies rarely utilize PC services\(^2\)

• Need to develop population-specific PC interventions for hematologic malignancies (ex. AML vs CML)

Professional Recommendations

- “Any patient with metastatic cancer and/or high symptom burden”
- Accredited programs “required to offer palliative care either on site or by referral”
- “Institutions should develop processes for integrating palliative care into cancer care”
- “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](https://www.ons.org/advocacy-policy/positions/practice/palliative-care)
EoL “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\(^5\)

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Psychological Trauma of Blood Cancer Diagnosis & Treatment
Patients with high-risk AML who were hospitalized for intensive chemotherapy,
– 28% had clinically significant PTSD symptoms at 1 month after diagnosis.
This is not one-size-fits all PC

- Low symptom burden and low mortality (i.e. indolent lymphomas)
- PC when disease progresses/prognosis is poor

- Moderate symptom burden and mortality (i.e. aggressive lymphomas)
- Early intermittent PC

- High symptom burden and mortality (i.e. acute leukemias)
- Early longitudinal PC

- Prolonged periods with low symptom burden (i.e. myeloproliferative neoplasms)
- Identify triggers for PC (i.e. hospitalization)

Survival in AML

Percent Surviving
5 Years

28.3%

2009-2015

Barriers to PC Integration

- Cultural Barriers
- Illness-Specific Barriers
- System-Based Barriers
- Lack of PC Resources
- Prognostic Uncertainty
- Misperception and Reluctance

LEAP Study – Integrated PC for Patients with AML
LEAP Study Design

160 patients with high-risk AML admitted to receive intensive induction

**Randomization:** Stratified by study site, and diagnosis (newly diagnosed vs. relapsed/refractory)

**Sites:** MGH, Duke, Penn, Ohio State

- **Inpatient Integrated Palliative and Leukemia Care (86)**
  - At least 2 visits weekly during hospitalizations (mean 2.2)

- **Standard Leukemia Care (74)**
  - Palliative care consult upon request.

**Longitudinal data collection**
- PROs at Week 2
- PROs up to 1 year
- Health care utilization & EOL outcomes at 1 year

El-Jawahri, Leblanc, Kavanaugh, Webb et al., JAMA Oncol 2020
Integrated Palliative Care in AML

Pall Care + Leukemia Care

Coping
Symptoms
Collaboration
IPC for patients with AML is dose dependent (~2x/week), collaborative, and focused on coping and symptoms.
Figure 2. Effect of Integrated Palliative and Oncology Care on Patient-Reported Quality of Life and Psychological Distress by Scale

El-Jawahri, Leblanc, Kavanaugh, Webb et al., JAMA Oncol 2020
End of Life Outcomes

Patient reported discussions of EOL care preferences

- Intervention: 75%
- Control: 40.00%

Chemotherapy in the last 30 days of life

- Intervention: 34.90%
- Control: 65.90%

El-Jawahri, Leblanc, Kavanaugh, Webb et al., JAMA Oncol 2020
IPC = New Standard of Care

**JAMA Oncology**

**RCT: Effectiveness of Integrated Palliative and Oncology Care for Patients With Acute Myeloid Leukemia**

**POPULATION**
96 Men, 64 Women

**INTERVENTION**
160 Patients randomized

**SETTINGS/LOCATIONS**
4 Tertiary care academic hospitals in the United States

**PRIMARY OUTCOME**
Quality of life (QOL) as measured by the Functional Assessment of Cancer Therapy-Leukemia scale (score range, 0-176), with higher scores indicating better QOL.

**FINDINGS**
Patients randomized to the palliative care intervention reported better QOL at week 2 compared with those randomized to usual care.

IPC: adjusted mean score, 116.45 (95% CI, 110.45-122.42)
Usual care: adjusted mean score, 107.59 (95% CI, 101.43-113.74)

Coping Mediates the Effect of PC Intervention

Change in approach & avoidant oriented coping

Palliative Care

QOL at two weeks

Nelson, Amonoo, Kavanaugh, Webb, et al., Cancer, 2021
Coping Mediates the Effect of PC Intervention

Change in approach & avoidant oriented coping

Palliative Care

Depression at two weeks

Nelson, Amonoo, Kavanaugh, Webb, et al., Cancer, 2021
• RCT comparing a manualized supportive psychotherapy intervention compared to UC for patient with AML.
EASE: Phase 2 RCT

• Two components to the intervention with primary outcomes at 8 weeks:

  • EASE-psy → Psychological Intervention
    • Psychotherapy delivered over 8 weeks
  • EASE-Phys → Physical Symptom Intervention
    • Weekly physical symptom screening to trigger a pall care consult over 8 weeks.

Rodin et al. Supportive Care in Cancer (2020) 28:163–176
EASE: Phase 2 RCT

• EASE intervention compared to UC:
  – Significant treatment-group differences favoring EASE were observed:
  – Traumatic stress symptoms at 4 and 12 weeks
  – Pain intensity and interference at 12 weeks
  • (p < .05).

Rodin et al. Supportive Care in Cancer (2020) 28:163–176
EASE: Phase 2 RCT

- **Severity of traumatic stress symptoms**
  - EASE: Decrease over time
  - UC: Increase over time

- **Pain intensity**
  - EASE: Decrease over time
  - UC: Decrease over time

- **Pain interference**
  - EASE: Increase over time
  - UC: No significant change

- **Physical symptom severity**
  - EASE: Decrease over time
  - UC: No significant change
EASE: Phase 2 RCT

Rodin et al. Supportive Care in Cancer (2020) 28:163–176
IPC + AML Take Home Points:

• In these two randomized clinical trials of supportive care interventions for patients with AML, IPC or EASE led to substantial improvements in:
  – QOL
  – Psychological distress
  – EOL care
  – Family Satisfaction of Care

• Integrated palliative care should be considered a new standard of care for patients with AML.

*El-Jawahri, Leblanc, Kavanaugh, Webb et al., JAMA Oncol 2020*
PROTECT Study – Integrated PC During SCT Admission
913 Multi-Site Randomized Trial of Inpatient Palliative Care for Hospitalized Patients Undergoing Hematopoietic Stem Cell Transplantation

Program: Oral and Poster Abstracts
Type: Oral
Session: 906. Outcomes Research – Myeloid Malignancies: Symptom Burden and Supportive Therapies
Hematology Disease Topics & Pathways:
Research, adult, Clinical Research, health outcomes research, patient-reported outcomes, Study Population, Human

Monday, December 11, 2023: 2:45 PM

Areej El-Jawahri, MD\textsuperscript{1}, Thomas W LeBlanc, MD\textsuperscript{2}, Alison Kavanaugh\textsuperscript{3*}, Jason Webb, MD\textsuperscript{4*}, James Fausto\textsuperscript{5*}, Lara Traeger\textsuperscript{2*}, Joseph Greer, PhD\textsuperscript{3*}, Vicki Jackson, MD\textsuperscript{3*}, Nora Horick\textsuperscript{5*}, Zachariah Defilipp, MD\textsuperscript{7}, Yi-Bin Chen, MD, MS\textsuperscript{5}, Stephanie J. Lee\textsuperscript{8} and Jennifer Temel\textsuperscript{3*}
Protect Trial

- **Sites:** Three academic hospitals (Penn, MGH, Duke).
- **Population:** Allo + Auto Transplants During Inpatient Care
- **Randomization:** Usual SCT Care vs. Integrated Early PC
- **Intervention:** Two (2) visits per week by PC Clinician (MD/DO or APP)
  - Symptom Management
  - Coping Support
- **Primary outcome measures at week-2:**
  - QoL (FACT-BMT)
  - Depression (HADS-D)
  - Anxiety (HADS-A)
  - PTSD (Civilian PTSD Checklist)
  - Symptom Burden (ESAS)

PROTECT Trial - Results

• Enrolled 360 patients (70% of eligible pts)
• Mean age = 55.4 (SD=12.5), 61.9% male, 76.6% White
• 23.4% racial minorities, 8.7% Hispanic ethnicity
• 50.2% underwent allogeneic HSCT between October 2018 and July 2022.
Results – RCT PC for SCT

• Compared to those receiving usual care, participants receiving the inpatient palliative care intervention reported: (week-2 primary endpoint)
  – **Better QOL** (95.5 vs. 89.3, P<0.001) at week-2.
  – **Lower depression** (5.9 vs. 6.9, P=0.041) and **PTSD symptoms** (26.0 vs. 28.2, P = 0.022) at week-2.
  – **Lower symptom burden** (35.3 vs. 40.1, P=0.018) at week-2.
  – **Better fatigue scores** (28.6 vs. 25.6, p=0.014) at week-2.
Conclusions

• In this multi-site randomized clinical trial, inpatient palliative care led to substantial improvements in patients’ QOL, depression and PTSD symptoms, symptom burden, and fatigue during HSCT hospitalization compared to usual care.

• *Integrated palliative care should be considered a new standard of care for patients hospitalized for HSCT.*
Future Clinical Trial:
SCOPE - Leukemia
SCOPE-Leukemia

- Specialty Compared to Oncology Delivered Palliative Care for Patients with Acute Myeloid Leukemia

- Cluster randomized comparative effectiveness trial of primary palliative care (PPC) vs. specialty palliative care (SPC) in 1150 patients with high-risk AML and their caregivers. (NCT05237258)
Primary Palliative Care

- Patient enrolled in study within 72 hours of admission with new or relapsed AML
- Cared for by leukemia clinicians trained in palliative care

All Subsequent Hospitalizations*

Specialty Palliative Care

- Patient enrolled in study within 72 hours of admission with new or relapsed AML
- Cared for by leukemia clinicians and seen at least twice per week by palliative care clinicians

All Subsequent Hospitalizations*

* Until death or end of study (minimum of 12 months)
Study Design

20 PCRC Institutions

Primary Palliative Care
Leukemia clinicians who care for patients with AML are trained in palliative care

Specialty Palliative Care
Cared for by leukemia clinicians who have been trained in palliative care

Patients admitted to hospital with AML are:

Cared for by leukemia clinicians and seen at least twice weekly by palliative care clinicians

Study Outcomes

Primary Outcome
Patient quality of life

Secondary Outcomes
Patient Outcomes
Depression and anxiety
Post traumatic stress disorder
End-of-life communication
Chemotherapy before death

Caregiver Outcomes
Quality of life
Depression and anxiety
Caregiving burden
Take Home Points

• IPC should be the new standard of care for patients with AML and those undergoing HSCT during inpatient admissions.

• Longitudinal integrated PC + Leukemia/SCT care results in improved QoL and psychological outcomes for patients with AML and those undergoing SCT.

• Scaling palliative care integration may involve primary PC interventions/training vs. need for specialty care integration.
Thank You
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