Evaluating quality of life and symptom relief for adult acute inpatient leukemia patients receiving integrative medicine therapies

Background
- Leukemia represents 3.6% of all new cancer cases in the U.S. as of 2016, making it the 10th most common diagnosed cancer. Treatment for leukemia is often emergent and aggressive, requiring prolonged hospitalizations and intensive follow up.
- Compared with treatment for other cancers, patients receiving treatment for hematologic cancers such as leukemia exhibit higher levels of emotional and mental distress with an increased burden on psychosocial roles and a well-documented cancer symptom cluster of fatigue, pain and sleep disturbances.
- These symptoms and psychosocial consequences are often difficult to manage with conventional medical modalities and interventions alone.

Objectives
- To determine whether integrative medicine treatments improve patient assessment of quality of life
- To measure the effects of integrative medicine treatments on patient-reported pain scores
- To identify the role integrative medicine can play in multimodal treatment of leukemia symptoms

Methods
Phase One: Qualitative data collection
- FACT-Leu questionnaire, a quality of life survey focusing specifically on leukemia symptoms
- Pre-test: prior to integrative medicine intervention
- Post-test: after at least three integrative medicine interventions

Phase Two: Quantitative data collection
- Variables related to cancer cluster symptoms, including pain scores, will be compared to matched controls retrospectively
- All data collected via custom-built REDCap data collection tool

Results
- Twenty-three patients have completed pre- and post-surveys. Preliminary results include:
  - 12.5% increase in physical well-being score
  - 8% increase in social/family well-being score
  - 2% increase in emotional well-being score
  - 0.6% decrease in functional well-being score
  - 9.7% increase in leukemia subscale score
  - 7.2% increase in overall FACT-Leu score

Conclusions
At this point in the project, preliminary findings regarding quality of life and symptom relief from integrative medicine therapies are:
- Integrative medicine therapies improve patients’ perception of their physical well-being (e.g. energy level, nausea, pain, side effects)
- Integrative medicine therapies improve patients’ perception of leukemia-specific cancer cluster symptoms (e.g. fever, chills, fatigue, bleeding, risk of infection)
- Integrative medicine therapies improve patients’ perception of their overall quality of life

Future Directions
- Continue to recruit patients for Phase One qualitative study
- Determine whether individual’s chemotherapy treatments impact and possibly explain the decrease in functional well-being scores
- Begin Phase Two—a quantitative data comparison of cancer cluster symptoms with matched controls
- Identify sustainable ways to offer integrative medicine on inpatient leukemia units (e.g. floor nurse education; hiring specially trained integrative medicine nurses)

References

Funding Source: The Helene Fuld Leadership Program for the Advancement of Patient Care Quality and Safety