

Integrative Medicine in Hematology-Oncology

Shaunak Pandya, MD

Hematology-Oncology Fellow

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University of Arizona - Tucson



Overview

- **Integrative Medicine**
- **Introduction to IMHO Fellowship**
- **Research – IIT: Yoga in Multiple Myeloma**

What is Integrative Medicine?

"Integrative medicine and health reaffirms the importance of the relationship between practitioner and patient, focuses on the whole person, is informed by evidence, and makes use of all appropriate therapeutic and lifestyle approaches, healthcare professionals and disciplines to achieve optimal health and healing."

Academic Consortium for Integrative Medicine and Health, 2022

"Healing-oriented medicine" – AWCIM

IMHO Fellowship Program

- Concurrent fellowship (ABOIM) program with traditional hematology-oncology fellowship program at University of Arizona (Tucson) and Mayo Clinic (Arizona)
- Directed by ABOIM board-certified integrative medicine physicians and program directors Dr. Camoriano (Mayo Clinic) and Dr. Gowin (U of A)
- 1 fellow from U of A and 1 fellow from Mayo Clinic each year (7 currently)

IMHO Fellowship Program

- **1000 hours of educational content over 3 years**
 - AWCIM online curriculum (550 hours) – nutrition, mind-body, supplements/herbal remedies, subspecialty specific curriculum
 - Clinical time (integrative oncology clinics including UCSF remotely)
 - Didactics (Journal Clubs, Pearls)
 - Research (Grant-supported IIT)
 - Conferences (SIO, IOWG)
 - Immersion weeks at University of Arizona – Tucson

Research

- Each fellow supported by research grant from AWCIM to advance integrative oncology evidence-based practice
- Need for more supportive care evidence which improve quality of life

Integrative Therapies During and After Breast Cancer Treatment: ASCO Endorsement of the SIO Clinical Practice Guideline

Gary H. Lyman, Heather Greenlee, Kari Bohlke, Ting Bao, Angela M. DeMichele, Gary E. Deng, Judith M. Fouladbakhsh, Brigitte Gil, Dawn L. Hershman, Sami Mansfield, Dawn M. Mussallem, Karen M. Mustian, Erin Price, Susan Rafté, and Lorenzo Cohen

KEY RECOMMENDATIONS

A description of the recommendation grading system used by the SIO is provided in [Table 1](#). In addition to the following recommendations, the SIO guideline lists several outcomes and therapies for which evidence was insufficient and no recommendation was made. This list is provided in [Table 2](#) of this endorsement, with additional information provided in the SIO guideline. (ASCO Expert Panel's Statements in **bold italics**.)

Acute Radiation Skin Reaction

- Aloe vera and hyaluronic acid cream should not be recommended for improving acute radiation skin reaction. (Grade D)

Anxiety and Stress Reduction

- Meditation is recommended for reducing anxiety. (Grade A)
- Music therapy is recommended for reducing anxiety. (Grade B)
- Stress management is recommended for reducing anxiety during treatment, but longer group programs are likely better than self-administered home programs or shorter programs. (Grade B)
- **Yoga is recommended for reducing anxiety. (Grade B)**
- Acupuncture, massage, and relaxation can be considered for reducing anxiety. (Grade C)

Chemotherapy-Induced Nausea and Vomiting

- Acupressure can be considered as an addition to antiemetic drugs to control nausea and vomiting during chemotherapy.

Quality of Life

- Meditation is recommended for improving quality of life. (Grade A)
- **Yoga is recommended for improving quality of life. (Grade B)**
- Acupuncture, mistletoe, qigong, reflexology, and stress management can be considered for improving quality of life. (Grade C)

Depression and Mood Disturbance

- Meditation, particularly mindfulness-based stress reduction, is recommended for treating mood disturbance and depressive symptoms. (Grade A)
- Relaxation is recommended for improving mood disturbance and depressive symptoms. (Grade A)
- **Yoga is recommended for improving mood disturbance and depressive symptoms. (Grade B)**
- Massage is recommended for improving mood disturbance. (Grade B)
- Music therapy is recommended for improving mood disturbance. (Grade B)
- Acupuncture, healing touch, and stress management can be considered for improving mood disturbance and depressive symptoms. (Grade C)

Fatigue

- Hypnosis and ginseng can be considered for improving fatigue during treatment. (Grade C)
- **Acupuncture and yoga can be considered for improving post-treatment fatigue. (Grade C)**
- Acetyl-L-carnitine and guarana should not be recommended for improving fatigue during treatment. (Grade D)

Sleep Disturbance

- **Gentle yoga can be considered for improving sleep. (Grade C)**

(continued on following page)

A Randomized Pilot Study of Yoga Intervention in Patients with Multiple Myeloma on Active Therapy

- Multiple myeloma (MM) – improved treatment and mortality rates, but higher symptom burden and impact on quality of life¹⁻³
- Yoga – heterogenous group of mind-body practices involving physical postures, breathing exercise, and meditation
- Intervention: Weekly 40-minute yoga session for 12 weeks in patients with MM on active therapy

1. Branagan A, Lei M, Lou U, Raje N. Current treatment strategies for multiple myeloma. JCO Oncology Practice 2020; 16(1):5-14.

2. Costa LJ, Brill IK, Omel J, Godby K, Kumar SK, Brown EE. Recent trends in multiple myeloma incidence and survival by age, race, and ethnicity in the United States. Blood Adv 2017; 1(4): 282–287.

3. Kamal M, Wang XS, Shi Q, et al. Symptom burden and its functional impact in patients with “symptomatic” relapsed or refractory multiple myeloma. Support Care Cancer 2021;29:467–475.

Specific Aims

- **Aim #1:** Evaluate feasibility by measuring total accrual and overall completion rate of 12-week program
- **Aim #2:** Evaluate short-term impact on physical and psychological symptoms measured by Edmonton Symptom Assessment System (ESAS-r) after each weekly session compared to baseline and waitlist control group
- **Aim #3:** Evaluate impact on HRQOL measured by EORTC QLQ-C30 at 6 weeks and 12 weeks, compared to baseline and waitlist controls
- **Aim #4:** Evaluate impact on total activity (measured by daily steps) and heart rate variability using remote sensor data from Fitbit (optional – FitBit Provided)

**MyDataHelps

Study Recruitment

- Recruitment → 40 MM patients on active therapy over 3-month period from UACC
- Participants randomized to immediate yoga arm or waitlist control (delayed yoga) arm

Inclusion Criteria:

- Any adult of age 18 and above
- Able to understand basic English
- Able to provide informed consent
- Diagnosis of Multiple Myeloma on active treatment as determined by investigator
- Good performance status as defined by European Cooperative Oncology Group Score 0-1
- Able to utilize computer/laptop and smartphone
- Able and willing to travel to yoga studio for weekly sessions
- Able to utilize a wearable device, such as Apple Watch and Fitbit (optional)

Exclusion Criteria:

- Poor performance status ECOG 2-4
- Actively participating in another clinical trial
- Poorly controlled mental health symptoms as determined by treating physician
- Reported fall or syncope in the last 2 months prior to enrollment
- Concurrent diagnosis of amyloidosis or other cancer requiring active treatment
- Currently practicing yoga on a routine basis (once weekly or more frequently)

Study Schedule

	IMMEDIATE YOGA GROUP (N=20)	DELAYED YOGA GROUP (N=20)
BASELINE	Eligibility, Informed Consent, Demographics, ESAS-r, EORTC-QLQ-C30, Wearable Device Connection	Eligibility, Informed Consent, Demographics, ESAS-r, EORTC-QLQ-C30, Wearable Device Connection
WEEK 1	Yoga, ESAS-r	
WEEK 2	Yoga, ESAS-r	
WEEK 3	Yoga, ESAS-r	ESAS-r
WEEK 4	Yoga, ESAS-r	
WEEK 5	Yoga, ESAS-r	
WEEK 6	Yoga, ESAS-r, EORTC-QLQ-C30	ESAS-r, QLQ-C30
WEEK 7	Yoga, ESAS-r	
WEEK 8	Yoga, ESAS-r	
WEEK 9	Yoga, ESAS-r	ESAS-r
WEEK 10	Yoga, ESAS-r	
WEEK 11	Yoga, ESAS-r	
WEEK 12	Yoga, ESAS-r, EORTC-QLQ-C30	ESAS-r, QLQ-C30
WEEK 13		Yoga, ESAS-r
WEEK 14		Yoga, ESAS-r
WEEK 15	ESAS-r	Yoga, ESAS-r
WEEK 16		Yoga, ESAS-r
WEEK 17		Yoga, ESAS-r
WEEK 18	ESAS-r, QLQ-C30	Yoga, ESAS-r, EORTC-QLQ-C30
WEEK 19		Yoga, ESAS-r
WEEK 20		Yoga, ESAS-r
WEEK 21	ESAS-r	Yoga, ESAS-r
WEEK 22		Yoga, ESAS-r
WEEK 23		Yoga, ESAS-r
WEEK 24	ESAS-r, QLQ-C30	Yoga, ESAS-r, EORTC-QLQ-C30

Acknowledgments

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Questions?