Strategies to Implement Exercise as a Treatment Modality to Manage Cancer-Related Fatigue

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Conflicts of Interest

• None to declare
Records identified through database searching (n = 17033)

Additional records identified through other sources (n = 0)

Records after duplicates removed (n = 128)

Records screened (n = 128)

Records excluded (n = 37)

Full-text articles assessed for eligibility (n = 91)

Full-text articles excluded, with reasons (n = 0)

Studies included in qualitative synthesis (n = 91)

Studies included in quantitative synthesis (meta-analysis) (n = 0)
Summary of Studies

- Total Number of Studies Screened N = 128
- After Screening – 91 studies
- Level of Evidence & Pedro Score was determined for each study
  - Level I  N = 1
  - Level II N = 1
  - Level III N = 47
  - Level IV N = 42
Level I Exercise Study

One Level I Study M. Schmitz et al 2014

- Exercise may help overall and physical CRF
- Resistance with weight machines
- 60-80% of 1 RM
- 2 days /week
- 60 minutes
- 12 weeks
- Pedro Score: 8
Level II Exercise Study

One Level II Study / Winters-Stone 2012

- Null study regarding fatigue
- Anaerobic Resistance Exercise vs stretching
- Resistance with dumbbells, barbells and weighted vests
- Moderate-Vigorous intensity
- 3/days week; two supervised; one at home
- 60 minutes
- 12 months
- Pedro Score: 8
Level III Exercise Studies

47 Level III Studies

• 25/47 had significant results
• Yoga, Aerobic, Resistance Training, Aerobic + Resistance Training
• Avg. Pedro Score: 8
Positive Studies (Level III) - 25

- Length of intervention: 4 - 12 Weeks
- Duration: 18 - 90 minutes
- Aerobic - 9
- Combo (Aerobic + Resistance) - 7
- Yoga - 5
- Resistance Training - 4
Level IV Exercise Studies

41 Level IV Studies
Summary

- Exercise thus as an intervention is reasonable to be suggested as an intervention to alleviate cancer related fatigue.
- The following exercise interventions have Level 3 evidence & hence reasonable to suggest:
  1. Aerobic exercise training
  2. Combination of Aerobic & Resistance training
  3. Yoga
  4. Resistance Training
  5. Walking
Strategies

• Awareness amongst oncologists/physicians & patients
• Exercise & Psychological interventions found to be more effective (Mustian et al 2017)
• Exercise program accessibility remains a challenge in implementing the guidelines
• Delivered by certified & trained PT/OT/Exercise scientists
• Insurance
Pathway Model

- Referral, screening, medical clearance, and programming for people
- Mina et al 2018
• Exercise screening and risk stratification

• Appropriate instruction in exercise by a QEP

• Provision of resources to support exercise engagement (for example, manuals, log books; Web sites or apps; and basic exercise equipment such as resistance bands, stability ball)

• Routine follow-ups with the QEP, scheduled to ensure appropriate adjustment of the exercise prescription to accommodate changes in capacity, goals, or health status
• Mode & Dose
• Aerobic
• Aerobic + Resistance
• Yoga
• Intensity: Moderate
• Duration: 20-60 minutes
Questions ????