

Impact of Exercise on Lymphoma Patients: A Systematic Review

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1. BACKGROUND



Exercise during chemotherapy is gaining momentum across the cancer continuum, with numerous studies highlighting positive physiological and psychosocial effects.

This is the first systematic review to focus solely on exercise during initial treatment and to assess its impact on muscle mass, muscle strength, and functional performance in malignant lymphoma patients.

2. AIM



To identify and summarize evidence on exercise's impact on muscle mass, muscle strength, functional performance, aerobic capacity, HRQoL and intervention feasibility in lymphoma patients during chemotherapy.

3. METHODS

INFORMATION SOURCES

Electronic databases:
 - MEDLINE
 - EMBASE
 - CINAHL
 - CENTRAL
 - CTRP
 - ClinicalTrials.gov

SEARCH STRATEGY

Keywords and MeSH terms related to Lymphoma and Exercise

ELIGIBILITY CRITERIA

- ✓ RCT studies
- ✓ Adults ≥ 18 years
- ✓ Diagnose: NHL or HL
- ✓ During chemotherapy
- ✓ Exercise-intervention (resistance or aerobic training or combination)

Outcomes:

- ✓ Muscle mass
- ✓ Muscle strength
- ✓ Functional performance
- ✓ Aerobic capacity
- ✓ HRQoL
- ✓ Feasibility

SELECTION PROCESS

Two authors screened; third resolved inconsistencies

QUALITY ASSESSMENT

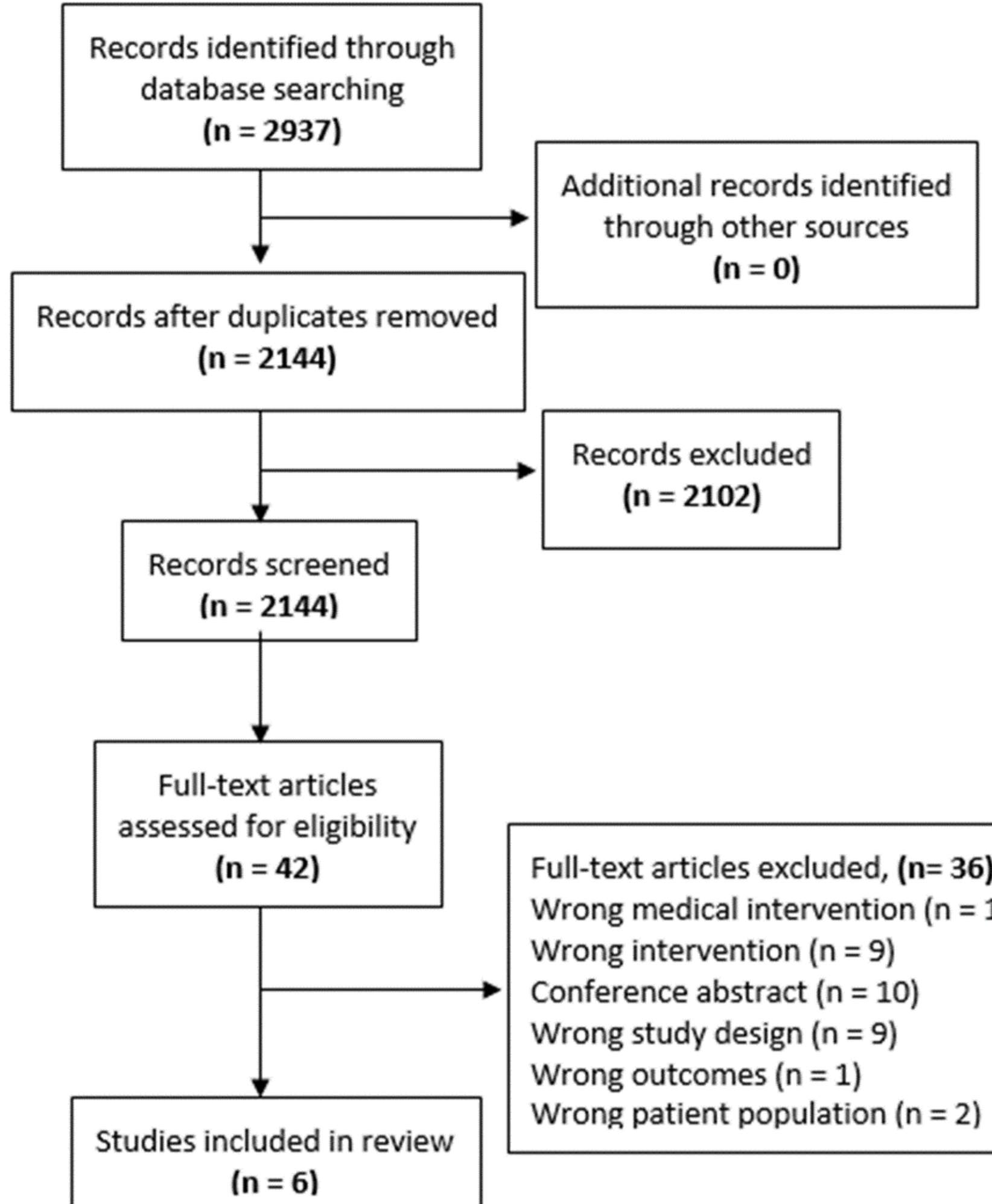
Cochrane's Risk of Bias tool

DATA EXTRACTION

- Study information
- Participant characteristics
- Interventions
- Type of outcomes
- Adverse events

DATA SYNTHESIS

Narrative synthesis

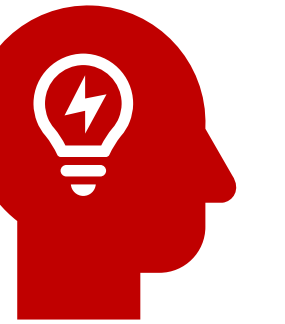


Flowchart of the study selection process

5. POTENTIAL IMPLICATIONS

- Exercise is recommended for patients with malignant lymphomas undergoing chemotherapy.
- Quality studies are required to explore exercise's impact on muscle mass, muscle strength functional performance, aerobic capacity, and quality of life in lymphoma patients during treatment

4. RESULTS



- Extensive clinical and study heterogeneity
- Exercise is feasible and safe for HL and NHL patients during treatment
- Positive indication of exercise effects on muscle mass, muscle strength, functional performance, aerobic capacity, and HRQoL
- High proportion of the studies were judged to have a high risk of bias
- Low certainty of evidence for all outcomes

6. CONTACT DETAILS



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