The Role of Exercise in Cancer Care: Current Evidence and Future Directions

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A "Pill" That Reduces:

CANCER RECURRENCE



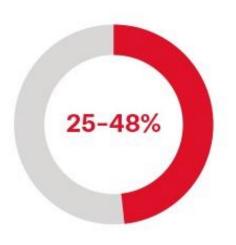
Hazard ratios from meta-analysis studies range from 0.79 [0.63-0.98] (n = 21,647) to 0.65 [0.56-0.75] (n = 38,560)

CANCER MORTALITY



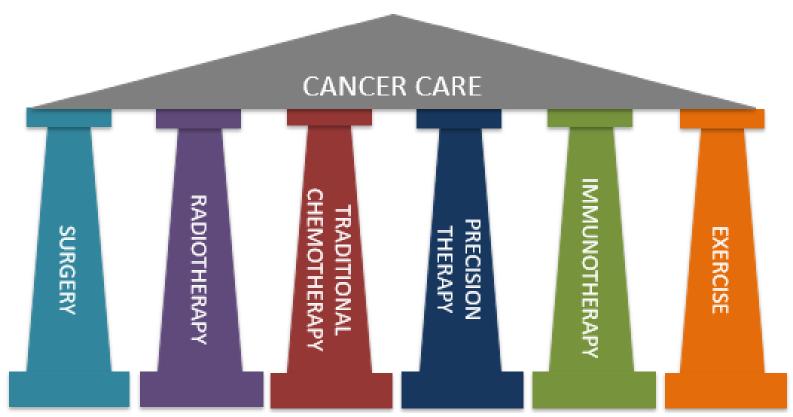
Hazard ratios from meta-analysis studies range from 0.72 [0.60–0.85] (n = 21,382) to 0.56 [0.38–0.83] (n = 10,470)

ALL-CAUSE MORTALITY



Hazard ratios from meta-analysis studies range from 0.75 [0.62–0.87] (n = 2379) to 0.52 [0.43–0.64] (n = 21,647)

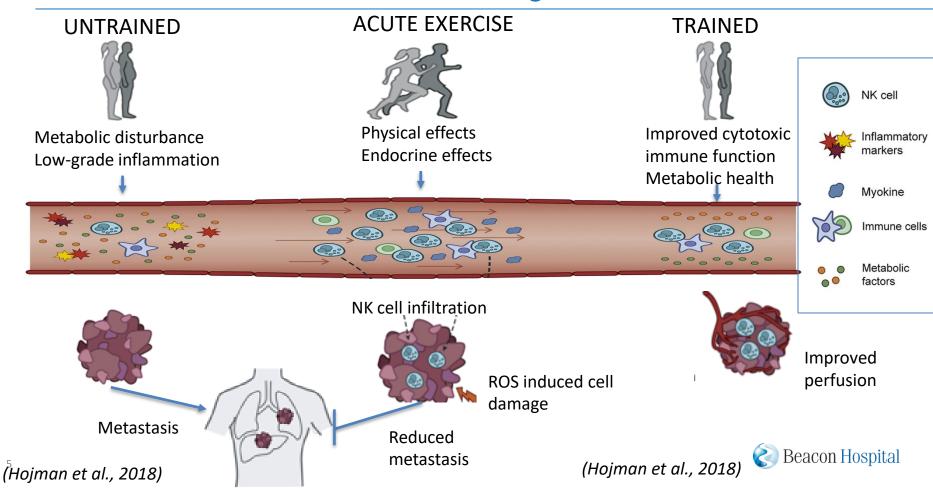
Exercise as a Standard of Cancer Care



Exercise Benefit at all Stages

DETECTION **SURVIVORSHIP** TREATMENT PALLIATION **DIAGNOSIS END OF TREATMENT Cancer Prevention Enhanced Drug Tolerance** Prevention of Enhanced drug tolerance Promotion of Treatment Promotion of treatment recurrence Efficacy Reduced long-term efficacy Reduced adverse effects adverse effects Reduced adverse effects of treatment of treatment **Attenuation of Cancer** cachexia

Exercise As A Protective Mechanism Against Cancer



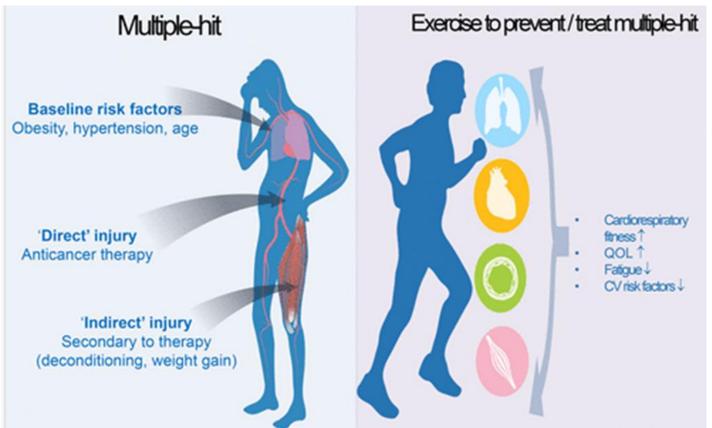
Exercise as a Preventative



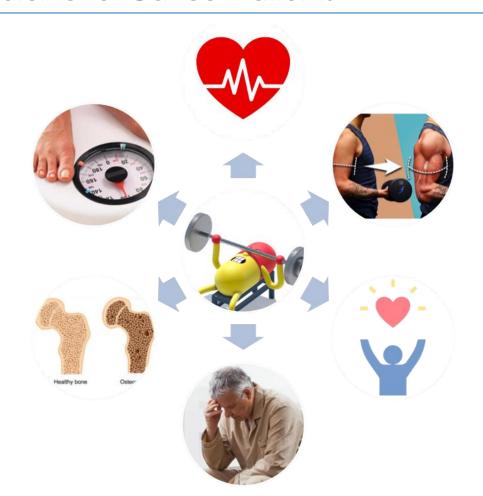
(McTiernan et al., 2019)



Exercise as a Cardiovascular Protector



Exercise as Medicine for Cancer Patients





Exercise Prescription







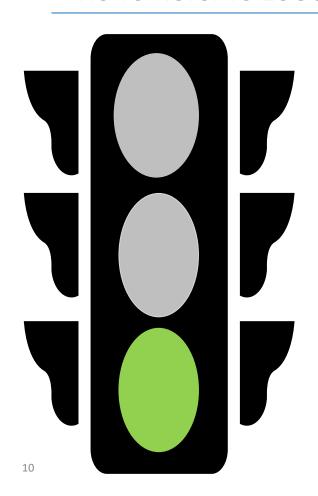
150 minutes Moderate Intensity



2 x per week

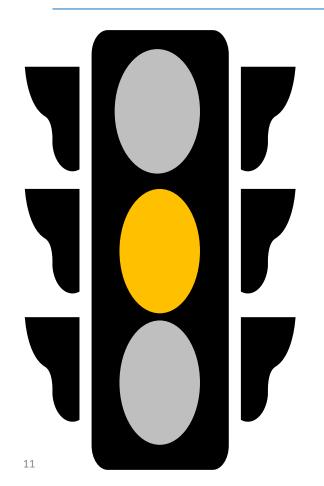


Who to Refer to Local Resources?



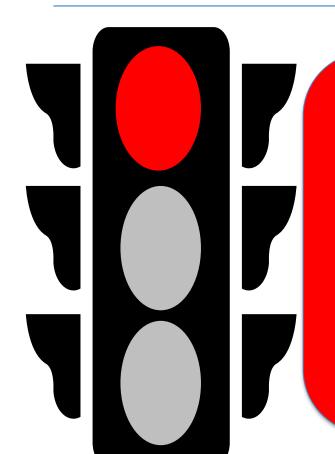
No co-morbidities

Who to Refer to General Physiotherapist/ Lymphoedema Therapist



Peripheral neuropathy
Musculoskeletal issues
Osteoporosis
Lymphoedema

Who to Refer to Exercise Oncology Trained Professional?



Lung or abdominal surgery Ostomy Cardiopulmonary disease Ataxia Extreme fatigue Severe nutritional deficiencies Worsening/changing physical condition Bone metastasis

Options at Beacon Hospital

Fit for Life Programme



6 week Allied Health
Rehabilitation Programme

1 to 1 Physiotherapy

Patient preference

Increased flexibility

Allows for lower functional ability

Highly individualised

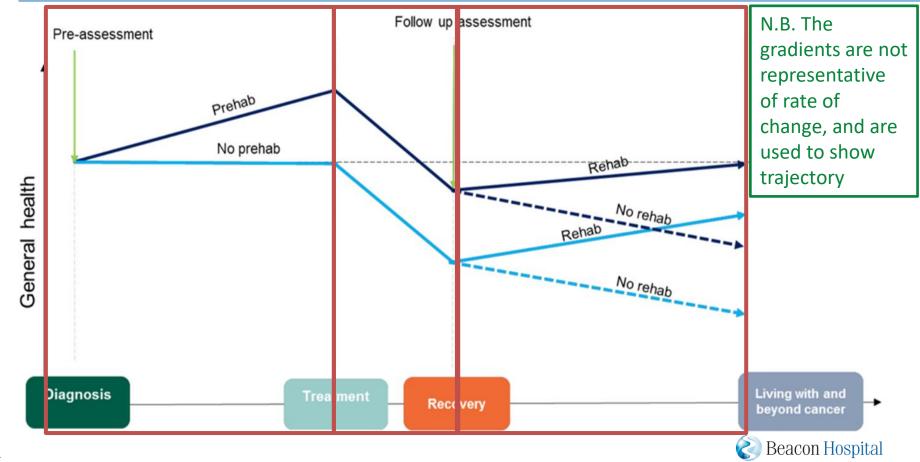
Virtual option

May progress to/follow up from class

Supervised > unsupervised



Possible Outcomes with Prehabilitation and Rehabilitation



Useful Resources

- https://www.exerciseismedicine.org/eim-in-action/moving-throughcancer/ - useful infographics and patient handouts
- > Cancer Exercise App free to download on iOS and android



https://cancerrehabilitation.ie - online resource for local services



Take Home Message

↑ Exercise prescription

↑ Physical Activity levels

↑ Improve Patient Outcomes Exceptional Patient Care



References

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