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Physical activity levels in men with bone metastatic prostate cancer and associations with physical and mental health outcomes

Abstract

Abstract of a presentation at the 2nd Prostate Cancer World Congress (PCWC), Cairns, Australia, 17-21 August 2015.

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Physical activity levels in men with bone metastatic prostate cancer and associations with physical and mental health outcomes

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Objective: To provide initial information on the prevalence of physical activity levels in prostate cancer patients with bone metastases and identify associations with physical and mental health outcomes.

Methods: Self-reported physical activity levels (Modified Godin Leisure-Time Exercise Questionnaire), physical and mental health outcomes (SF-36 Questionnaire), as well as objective physical performance measures (400 m walk, 6 m walk) were assessed in 48 prostate cancer survivors (mean age 70.7 \pm 8.0; BMI 28.5 \pm 4.2; PSA 52.7 \pm 154.1) with bone metastases (58.8% $>$ 2 regions affected) at baseline of a randomised controlled trial.

Results: Only 14 men (29.2%) met the current aerobic exercise guidelines (150 min of moderate intensity or 75 min of vigorous exercise per week or an equivalent combination), while 34 (70.8%) were insufficiently active. Men that were not meeting the aerobic exercise guidelines, had lower physical functioning ($p < 0.01$), role functioning (physical and emotional; $p < 0.05$), and general health scores ($p < 0.05$). The 6 m walk (fast pace) and 400 m walk times were also slower, indicating reduced physical performance in men who were insufficiently active compared to those meeting aerobic exercise guidelines ($p < 0.05$).

Conclusions: Lower levels of aerobic exercise are associated with reduced physical and mental health outcomes in prostate cancer survivors with bone metastases. While previous research has focused primarily on non-metastatic cancer patients, our initial results suggest that meeting aerobic exercise guidelines may preserve health outcomes in prostate cancer patients with advanced bone metastatic disease. Further research is required to confirm and expand these findings.