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Abstract

Abstract of a presentation at the 2nd Prostate Cancer World Congress, Australia, 17-21 August 2015

Disciplines

Medicine and Health Sciences | Social and Behavioral Sciences

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Methods: Ninety prostate cancer patients were stratified by disease progression into localised (n = 50; age = 69.1 years; height = 172.7 cm; weight = 83.8 kg; PSA = 2.16 ng/mL) and metastatic (n = 40; age = 71.4 years; height = 174.1 cm; weight = 86.6 kg; PSA = 28.85 ng/mL) groups. Patients underwent regional DXA scans to determine bone mineral content (BMC) of the spine, hip and femoral neck. Whole-body DXA scans were also performed to establish whole-body bone mass, lean mass, fat mass and trunk fat.

Results: LPC exhibited lower hip (2.9%) and waist (6.4%) circumferences than MPC. Further, LPC contained lower relative whole-body fat mass (21%) and trunk fat (14%) and higher relative whole-body lean mass (8.7%) than MPC. Relative BMC was higher in LPC for whole-body (3.1%), hip (6.1%) and femoral neck (3.5%) regions; yet higher in MPC for relative spinal BMC (4.2%) potentially due to bone metastatic lesions in the lumbar spine for this group.

Conclusions: Considerable musculoskeletal deterioration simultaneous with large increments in total body and trunk fat commensurate with disease progression provides support for the use of exercise to promote muscle-bone preservation and fat reduction across the disease progression.

187

Musculoskeletal comparison of patients with localised versus metastatic prostate cancer

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Objective: Musculoskeletal health is adversely impacted in patients with prostate cancer receiving androgen-deprivation therapy (ADT). Thus, it is of interest to compare muscle and bone characteristics of patients at different stages of disease progression: localised prostate cancer (LPC) versus metastatic prostate cancer (MPC).