

Aquatic physiotherapy management of an elderly orthopaedic patient with obesity

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Background

Patients who are elderly and obese are becoming more prevalent in rehabilitation hospitals and are a major public health concern in Australia. There are increasing challenges for therapy staff to improve function, prevent deterioration and achieve a timely discharge for these patients from the hospital setting. This presentation outlines the effectiveness of aquatic therapy for elderly patients with obesity both from a physical and psychological perspective while improving functional outcomes. The aquatic environment provides a safe yet challenging medium to exercise in with far less manual handling requirements by Physiotherapists.

Methods

A case study of a morbidly obese orthopaedic aged care patient within a sub-acute rehabilitation setting who is non-weight bearing in a fibreglass cast following an ankle fracture. A review of the current literature regarding the effectiveness of Aquatic Physiotherapy for this population was also undertaken.

Results and Discussion

Whilst there is limited research into the effectiveness of Aquatic therapy in this specific population, there is anecdotal and known physiological benefits associated with immersion and exercise. This case study explores the positive associations with cardiovascular fitness, joint range of motion, muscular strength and flexibility, pain reduction, relaxation, self-efficacy and confidence. A range of safe treatment options in the water during the non-weight bearing phase are explored to help minimise the risk of physical and psychological deterioration. The biomechanics of hopping and rotational control in water are also described to assist with independent pool recoveries and functional movement. The unique hydrodynamic properties of water are utilised to achieve the therapeutic goals for this complex aged care patient.

Biography

Catherine O'Brien is a senior Physiotherapist and Aquatic Coordinator at Austin Health. Catherine graduated from La Trobe University in 2008 and has worked in both public and private hospital sectors. She has a broad range of skills in the aquatic rehabilitation setting including neurological, complex orthopaedic, chronic pain and psychological trauma populations. Catherine is involved in lecturing at La Trobe University and the University of Melbourne within their aquatic programs and is also the current Chair of the APA Victorian Aquatic committee.