

Hydrotherapy in the Elderly: A Review of the Literature

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Abstract

Introduction: Nowadays many people are aged 65 years or more. In an elderly population preventive medicine has an important role. According to the literature, hydrotherapy can help the elderly to stay independent in daily living tasks, feel less pain and maintain more muscle strength, and it is successful in reducing the risk of falls and improving the quality of life. Absolute and relative contraindications, features of thermal water, and risk of falls must be considered to prevent complications.

Methods: A review of the literature was made with the help of MEDLINE, PubMed, PEDRO and COCHRANE and key words Hydrotherapy, Aquatherapy, Aqua Fitness, Elderly and Geriatrics. Five appropriate articles in the English language were found.

Discussion and Conclusions: Hydrotherapy and other exercise programmes have a positive influence on pain, muscle strength and quality of life in elderly people who can participate in them.

Keywords: Elderly; Geriatrics; Hydrotherapy; Pain; Quality of life

Introduction

Hydrotherapy (exercise in warm water) has an important role in improving quality of life and prolonging independence in elderly people who can participate in it, especially those who find exercise on land difficult [1]. The possibility of falls must be considered as well as features of thermal water, and all absolute and relative contraindications to participating in hydrotherapy [1-3].

In the population aged 65 and more there are health issues which could be improved, especially prevention of falls and hospitalisation, improvement of walking ability, prolongation of independence in daily tasks and quality of life [2-4]. Many studies and some literature reviews have already been published and they report positive and statistically significant improvements after the use of hydrotherapy in the elderly [1-5].

Methods

With the help of MEDLINE, PubMed, PEDRO, COCHRANE and the keywords Hydrotherapy, Aquatic Fitness, Aqua Exercises, Aquatherapy, Elderly and Geriatrics, Five articles in the English language were available.

Discussion

In the literature, there are many articles about hydrotherapy in the elderly. The authors in five of them write about its influence on independence in daily living tasks, pain, muscle strength, prevention of falls and quality of life [1-5]. The authors of all five articles recommend that contraindications, features of thermal water and risk of falls must be considered to prevent complications during hydrotherapy in the elderly [1-5].

Grüner Sveälv et al. (2012) recommended further studies on the effects of hydrotherapy on patients with biventricular systolic heart failure and at risk of elevated right ventricular pressure, because after hydrotherapy patients in their study had a decreased right ventricular function and higher right ventricular pressure [1].

Vécsey Kovách et al. (2013) observed the differences in quality of life and physical performance after pilates and aqua fitness in Eger, Hungary. The authors concluded that in some aspects of quality of life both types of physical activity are successful, so elderly people should take part in a well-prepared programme [2].

Leirós-Rodríguez et al. (2018) compared the health benefits of strength training, aqua fitness, and aerobic exercise for 108 older people. Strength and flexibility of upper and lower limbs were significantly better after aqua fitness. In all three groups, there were significant positive results for emotional limitations and physical function, while weight and BMI were significantly reduced [3].

Latorre-Roman et al. (2015) wrote that a 12-day social hydrotherapy programme in hypothermic ($\geq 20^{\circ}\text{C}$) hard water of medium mineralisation produced significant improvements for pain, mood state, sleep, and depression for 52 elderly adults who participated in their study [4].

Costantino and Romiti (2014) compared results of a Back School and Hydrotherapy Programme on 56 elderly individuals with more severe non-specific chronic lower back pain in the last three months and found no statistically significant differences [5].

The review of scientific literature of hydrotherapy for the elderly shows that it has a positive influence on pain, muscle strength and quality of life, but there are mostly no statistically significant differences in comparison to other exercise programmes.

Conclusions

Hydrotherapy and other exercise programmes have a positive influence on pain, muscle strength and quality of life in elderly people who can participate in them.

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