

Hydrotherapy: Prevention of Falls in Elderly People

Hidroterapia: prevención de caídas en personas de edad avanzada

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Abstract

Introduction. Falls are one of the largest and most common public health problems among elderly people, leading to increased morbidity, mortality and reduced quality of life. Most falls in elderly result from abnormal balance control mechanisms which are directly related with muscle force generation and associated with age related muscular changes and sedentary. Several studies addressing fall prevention have focused on the importance of physical practice on the improvement of the reception conditions for sensory information.

Some new studies have shown that hydrotherapy is currently applied in many rehabilitative programs. Examples of its use include improving muscular and cardiopulmonary endurance in the elderly. The use of water involves its chemical and physical properties and acts simultaneously on musculoskeletal disorders and balance improvements.

Methods. Research articles in scientific databases (PubMed; MedScape; Uptodate). Keywords were: elderly people; fall's prevention; physical exercise; Hydrology; Hydrotherapy

Results. According to the obtained results in the different articles, the hydrotherapy program promoted significant increases in the elderly's balance (using Berg Balance Scale in the majority of cases) and also promoted a significant reduction in the risk of falls among the studied populations.

Discussion. All of the analyzed studies have shown improvement in balance in elderly people with hydrotherapy programs. However, the functional tests and treatment programs used in these studies were different, making it difficult to make quantitative comparisons. The majority of the studies have also suggested that there is a reduction in the risk of falls, since balance has a direct relation with these risks, despite in any of them was used a model that scored the risk of fall, it was calculated indirectly, so it can be suggested that next studies use specific scales. Due to

that, well defined programs are fundamental for reproducing new research, and for confirmation of the results.

Conclusion. The elderly people that engage in regular controlled physical activity show better quality of life and less morbidity, than the sedentary subjects. The differences are more obvious with age increase, due to that the clinics should be alerted to the physical exercise in elderly people. The hydrotherapy rehabilitation program was effective in reducing the risk of falls among elderly people, thus, undesirable effects resulting from falls could be prevented.

Key words: Hydrotherapy, Prevention of falls, Elderly people

Palabras clave: Hidroterapia, prevención de caídas, Personas mayores