Benefits of Hydrotherapy in Parkinson's Disease

Amaral S⁽¹⁾, Cruz P⁽¹⁾, Ribeiro AM⁽¹⁾, Araújo R⁽¹⁾, Cantista P⁽¹⁾

⁽¹⁾Serviço de Medicina Física e de Reabilitação - Centro Hospitalar Universitário do Porto, Portugal sarafilipaamaral86@gmail.com

Introduction: Parkinson's disease (PD) is an idiopathic, slowly progressive and degenerative disease. The diagnosis is clinical. It is believed that with the increase in life expectancy, by 2020 more than 40 million people in the world will be carriers of PD. The mean age of onset of the disease is approximately 57 years. It is characterized by resting tremors, muscle stiffness, slow and decreased movements (bradykinesia) and postural and / or gait instability. Due to these changes, the risk of falling is increased, the consequences of which have a devastating impact on the mobility and quality of life of these people. As PD progresses, palliative pharmacological therapy is proving to be less effective in minimizing motor restraints, as well as having many side effects. Due to this problem, the intervention of Hydrotherapy has been shown to be effective in minimizing the process of functional decline. Hydrotherapy has long been used to treat neurological diseases, since the physical properties of water along with physical exercise bring preventive, motor and sensory benefits. The sensorial benefits are highlighted in PD, since they stimulate the balance, the notion of corporal and spatial schema and the proprioception thus promoting greater functional independence.

Objectives: to evaluate the benefits of hydrotherapy in Parkinson's disease.

Methods: Narrative review of the literature published until April 2018 in the main medical databases on the subject.

Results: The published studies prove the benefit of hydrotherapy in the control of PD symptoms. The scope of hydrotherapy on aspects of quality of life may be related to physical properties and water heating, which play an important role in improving and maintaining range of motion of the joints, reducing muscle tension, balance and coordination, flexibility and strengthening of muscles and pain. In addition to affecting motor domains, hydrotherapy is also reflected in non-motor domains, since improving domains such as physical discomfort and mobility can influence psychological and emotional aspects.

Water is a different medium that allows individual and group care, decreases the action of gravity, allowing three-dimensional exercises, without risk of falls, and

allows to perform exercises with both upper and lower limbs at the same time. In addition, this type of intervention is associated with the pleasurable activity of relaxation, in a pleasant environment and easy socialization.

It is important to note that patients with PD can often suffer from urinary incontinence and therefore the treatment should often be adapted in individual tanks and unfortunately not always possible because in many places they do not exist.

All these factors together contribute to improving patients' confidence and selfesteem.

Conclusion: The results demonstrate the numerous beneficial effects of hydrotherapy, which have a significant impact on the improvement of functionality and quality of life. Further studies are needed, however, the benefit of hydrokinesitherapy in Parkinson's disease evidenced in the current literature supports its use and therefore, its prescription should be encouraged.

Key words: Parkinson's disease, Hydrotherapy, Rehabilitation, Quality of life