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Nordic Walking can Reduce Back, Hip and Knee Pain While Walking but is Rarely Utilized as a Form of Treatment for These Conditions by Health Professionals

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Introduction

We performed a 12 week prospective, uncontrolled community-based study of the effects of Nordic Walking (NW) on pain on walking and on distance walked in 100 ambulatory elderly (age 60 or more) - mean age 74.4 ± 7.7 with back, hip and/or knee pain for an average of 11.7 ± 13.2 years [1]. The subjects volunteered for the study after reading an article about NW possibly relieving back, hip and knee pain that was published by the authors in a community journal. A Visual Analogue Scale (VAS) was used to assess the severity of pain, with zero being no pain and 10 being very severe pain. Distance walked was estimated by each person.

Mechanism of the Improvement

Our findings are consistent with growing evidence that NW may play an important role in the treatment of people with chronic pain in the neck [2], shoulder [3], back [4-7], hips [8] and knees [1]. This is not surprising since the two poles used in NW take some of the weight and pressure off the spine, as the poles are pushed downward and backward during walking, which reduces the stress on the spinal column, hips and knees and therefore reduces the degree of muscle spasm and pain [9-12]. In addition, by pushing the poles backward during walking the spine is straightened and this improves the posture which also helps relieve the spasm and pain. Finally the use of the poles causes increased exertion of many of the muscles in the upper body, (something that does not happen with ordinary walking). This increases muscle strength in the back, shoulders, chest, arms and abdomen, which further reduces muscle spasm and pain [2-12]. Health providers never suggested using Nordic Walking.

What was striking in our study was that despite the long years of pain and the failure of many treatments that they had received in the past including multiple analgesic agents, physiotherapy, muscle strengthening exercises, water therapy, chiropractic therapy, Feldenkrais and Pilates exercises, back, hip and knee surgery and other treatments, no health care provider had ever recommended to any of them to try Nordic Pole Walking. Similarly, reviews of treatment of back pain also do not mention NW as a form of treatment for low back, hip or knee pain [13-18].

Other Conditions which may also Benefit from Nordic Walking

There are many other conditions that may also benefit from NW [9-12] including Parkinsonism, Chronic Obstructive Pulmonary Diseases, hypertension, heart failure, Peripheral Vascular Disease (Intermittent Claudication), Sjogren's syndrome, and rehabilitation after acute coronary syndrome. In addition improved exercise tolerance, with less perception of shortness of breath has also been noted. In addition there is increased caloric expenditure (because more muscles are used than in normal walking) which leads to weight loss, lower HDL, higher LDL, lower blood pressure in hypertensive and better diabetic control. Mood elevation and improvement in depression and better balance and stability with fewer tendencies to fall have also been noted [9-12].

Results

91% of these people experienced a) a reduction in pain on walking as measured by VAS, the mean pain severity over the 12 week period falling from 6.8 ± 1.6 to 1.5 ± 1.6, (a reduction of about 80%) and b) an increase in the distance they were able to walk from 504.7 ± 591.4 m to 1851.7 ± 940.0 m (as judged by their own estimation). When walking without the poles the pain on walking and distance walked returned quickly to what they had been before using them. In no case had any health care provider ever suggested using NW as a form of therapy.

Limitations

The major limitation of our study is that it was uncontrolled. Clearly more studies are needed on the use of NW in back; hip, and knee pain and these should be controlled studies. But even without further studies current data suggest that there is little to lose and possibly much to gain from trying this inexpensive, safe, pleasant and easily- learned form of therapy.

Conclusion

Nordic Walking holds promise for the effective treatment of chronic back, hip and knee pain, both in the degree of relief of pain on walking and in the distance these people can walk. It is a simple exercise to learn and perform, and is safe and inexpensive. Is it not time for health providers to offer this form of treatment when standard treatments do not succeed in relieving pain in the back, hips and knees on walking or even as an early treatment? However more controlled studies are needed to clarify its role.

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