Results from a home based exercise protocol to elderly people with Osteoarthritis

Vítor Pinheira [1,2]; Bárbara Gonçalves [1]; Sara Pereira [1]; Abel Rodrigues [1]; Rui Gonçalves [3]

[1] Physiotherapist, Polytechnic Institute of Castelo Branco, College of Health Dr. Lopes Dias, Castelo Branco, Portugal
[2] Phd Student in Gerontology – UNIFAI – ICBAS – University of Porto, Portugal
[3] Physiotherapist, Polytechnic Institute of Coimbra, College of Health Technology of Coimbra, Portugal

PALAVRAS-CHAVE: Osteoarthritis; Home-based protocol; Elderly; Mobility; Physiotherapy

Contato: *vpinheira@ipcb.pt*

INTRODUCTION

Osteoarthritis is one of the most commom problems in elderly populations and the most commom cause of disability. Knee is one of the most affected joint and the loss of range of motion and function will limit daily activities and the mobility. Self-management programs with exercises performed at home may be a useful therapy. These programs are based on the quadriceps strengthening exercises, low aerobic strength in order to improve the functional state, pain and aerobic capacity.

OBJECTIVES

Evaluate the effectiveness of an exercise protocol performed at home on improving the functionality, mobility and health related quality of life of elderly people with knee osteoarthritis.

METHODS

Exploratory, descriptive and longitudinal study. 41 subjects have been selected according to the inclusion criteria (age >63 years, with symptoms of knee osteoarthritis) and exclusion (inability to perform gait, hip osteoarthritis and prosthetics hip or knee). The subjects made an initial assessment (T0) before beginning the protocol (applied during 8 weeks, daily, in the summer of 2013) performed at home and meeting occasionally in groups, with the researcher, to correct the learned exercises, clarify questions and add some exercises or progressions. After the 8 weeks was applied an new assessment (T1) and the follow-up is taken in T2 and T3, (respectively, at 3 and 6 months later). In the assessment was used the Knee Injury and Osteoarthritis Outcome Score (KOOS), the Timed Up and Go Test (TUG) and the SF-12. Data from changes in daily routine of the subjects are also collected. The protocol was applied by two physiotherapists.

RESULTS

Table 1 / 2 - Characteristics of the sample
Table 3 – Results of SF-12 and TUG
Table 4 - Results of KOOS

Table 1

Female	82,90%
Married	51,20%
Education (4 years)	48,80%
Without social activities	82,90%
Bilateral Osteoarthrosis	70,70%
Gait without assistive devices	75,60%

Table 2

Age	75,98 ± 7,63
Body mass index	28,78 ± 4,78
Diseases reported (number)	1,58 ± 1,17
Medication (Drugs/day)	2,90 ± 2,07
Medical visits (last 6 months)	2,24 ± 1,33

Table 3

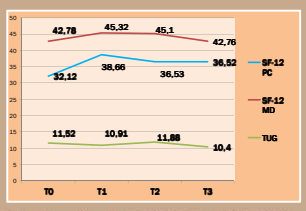
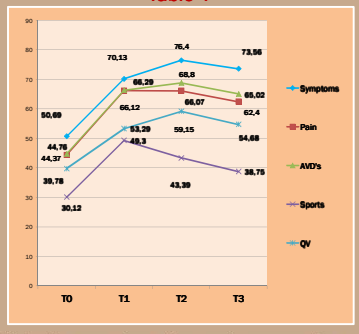


Table 4



- 62.1% of subjects in T2 (55.2% in T3) was still do the exercises, the main reason the pain reduction;
- The significant gains achieved by the completion of the protocol were kept after 3 and 6 months in dimensions Symptoms, Pain, Activities of Daily Living and Quality of Life. (KOOS)
- In the dimension of Sport and Recreation Function improvement obtained with the protocol is sustained only in the first 3 months.
- Perception of health status (SF-12) physical component presents results from the protocol implementation, that remain at 3 months, but they lose statistical significance in the assessment at 6 months; there is no significant changes in the mental component of SF-12
- There are significant gains in mobility (TUG) at the end of the protocol, slight decline at 3 months and better scores at the end of follow-up. This can be explained because a most of the individuals continue to perform the exercises.

CONCLUSION

Participation in an exercise protocol for people with osteoarthritis, performed at home, shows effective results, that remain after 6 months. The decrease in symptoms, with particular regard to the pain is the major reason why the subjects continue to perform the exercises.

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