Material and method.– Fifty patients with knee OA were recruited. Patients with previous surgery or steroid injection were excluded. Subjects were divided into two groups: Group I (conventional treatment) and group II (conventional treatment and ESWT). Treatment focus was 0.5 cm below the medial tibia plateau in anteroposterior view and 0.5 cm from the skin edge in lateral view. One thousand shock waves with 0.12 mJ/mm² energy flux density were delivered once a week for 3 weeks. Pain and functional outcome were assessed by Western Ontario and McMaster Universities Osteoarthritis Index (WOMAC) score at baseline and at 3 and 8 weeks. WOMAC score consisted of 3 items (pain, stiffness, and physical function).

Results.– There were no significant differences in demographic findings between the groups. Comparing both groups, group II showed significant improvement in pain and functional score at 8 week ($P < 0.05$). Discussion.– This study showed ESWT has a beneficial effect on pain and functional outcome of knee OA. Further study is carried out in order to compare other treatment methods.

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P196-e
Effects of physiotherapy on reducing pain in knee osteoarthritis
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Keywords: Physiotherapy; Barthel Index (BI); Visual pain scale (VAS)

Introduction.– The aim of this study is to evaluate the effects of physiotherapy on the activities of daily life as well as the reduction of pain in knee osteoarthritis.

Methods.– A retrospective-prospective clinical study included 63 patients. Subjects were divided into two groups. The first group included 26 patients treated with physiotherapy in combination with electrotherapy; the second group included 37 patients treated with physiotherapy combined with sonotherapy. In this study, we analyzed age, sex, activities of daily living by Barthel Index and the intensity of pain by visual pain scale (VAS).

Results.– Both groups were analyzed for age, sex, and values Barthel index at admission and discharge. There was no statically significant difference between groups. VAS at admission was almost identical in both groups. VAS at discharge was a little lower in the group treated with physiotherapy and sonotherapy. There was no statistically significant difference ($P > 0.05$).

Discussion.– Physiotherapy improved the activities of patient’s lives, in the largest case of 1 point. We can conclude that both types of therapy, in combination with physiotherapy, led to a decrease of pain in patients with knee osteoarthritis.

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P197-e
Correlations between functional status and the quality of life in patients with knee osteoarthritis
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Keywords: Knee osteoarthritis; Correlation; Functional status

Objective.– The main purpose of this observational study was to evaluate the efficacy of rehabilitation treatment and its influence on the functional status and on the quality of life in patients with knee osteoarthritis.

Methods.– The study included 138 patients with knee osteoarthritis, diagnosed according to ACR criteria, mean age 61.52 ± 11.63 years, randomized in function of the treatment in three lots: two control lots with drug therapy (56 patients), respectively with exercises (41 patients) and a test lot with physical therapy and exercises (41 patients). All patients were evaluated at the initiation of the study, after 3 months, 6 months and one year.

Results.– The efficacy of physical-kinetic treatment was reflected by statistically significant improvements ($P < 0.05$) of mean scores for the questionnaires for functional status, Lequesne Index and for the quality of life, the Short Form 36 Helth Survey (SF-36), knee joint pain evaluated on a visual analogue scale and for knee mobility. Lequesne’s Index mean value influence on SF-36 improvement is well above 50%; there is a correlation between indicators estimated as moderately high (0.8).

Conclusion.– The improvement of the clinical and functional parameters has a significant impact on increasing the quality of life in patients with knee osteoarthritis.

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P198-e
Outcome measures following self-management to the knee osteoarthritis
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Keywords: Knee osteoarthritis; Exercise therapy; Self-management; Outcome

Introduction.– Knee osteoarthritis is a painful condition causing disability and handicap. Even if exercise therapy is a key treatment modality, the optimal content of this treatment has yet to be precisely described.

Aim.– To assess the effectiveness of a self-management program.

Methods.– One hundred and forty-six patients received advice and information for the practice of specific exercises at home. Exercise therapy was explained to patients to improve adherence to treatment. Patients were assessed before treatment, after treatment and at each 3-month follow-up. Outcome measures included visual analogue scale (VAS) for pain on walking and at rest, range of motion, WOMAC and LEQUESNE index.

Results.– The mean final outcome measurements were taken after 12-month of follow-up. The average VAS score for pain at rest dropped from 68 ± 10 to 31 ± 30. The score for pain during effort fell from 85 ± 13 to 40 ± 30. In 82% of cases, joint mobility was better. There was a significant decrease of number of unplanned medical consultations. Functional scores were improved. However, functional improvement correlated well with adherence to exercise therapy.

Conclusion.– Even when it is done at home unattended, unsupervised and without expensive equipment, self-management program may be beneficial for pain and function.

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P199-e
A home-based exercise for people with osteoarthritis: Effectiveness and exercise adherence
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Keywords: Knee osteoarthritis; Exercise; Self-rehabilitation; Exercise adherence; Motivation

Introduction.– Knee osteoarthritis is the major cause of disability in the elderly population. Exercise and patient education are included in the EULAR recommendation for the treatment of knee osteoarthritis.