Results.– It was found a significant improvement in VAS pain and range of motion particularly in abduction from 71° to 119° and external rotation of 29° to 43° between the beginning and end of hospitalization.

Discussion.– The natural history of adhesive capsulitis, whether idiopathic or secondary, is not always favorable. There are no international recommendations for the management of adhesive capsulitis. Intensive rehabilitation or not coupled with other treatment such as distension or infiltration of articular corticosteroid is an effective especially at the intermediate stage to increase joint mobility to limit the risk of sequelae, and reduce the duration of disease of adhesive capsulitis.


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Measurement of therapeutic effect of ultrasound on knee osteoarthritis; double blind study
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Therapeutic ultrasound is often used in the treatment of knee osteoarthritis (OA), however sufficient evidence of its effect is lacking. More scientific evidence is needed to confirm its effect. Aim.– The aim of this work is to determine the effect of ultrasound therapy on pain, stiffness and functional ability of patients with knee OA. Examinees and methods.– This was randomized, double blind, placebo controlled study of continuous effects of ultrasound on knee OA conducted in out-patients clinic for physical medicine and rehabilitation.

Examination was conducted on 80 patients with knee OA, mean age of 60 years and average duration of clinical difficulties of 8.3 years. Physical therapy (PT) lasted for three weeks. All patients also had thermotherapy and exercises. Additional therapy with continuous ultrasound, with 0.8 W/cm² that lasted for five minutes was applied to 40 patients (group A) and 50 patients had placebo ultrasound (group B). For objectification of difficulties we used Lekrt’s scale (pain), the Lequesne index and Womac scale with subscales for pain, stiffness and functional disability evaluation. We measured joint circumference, joint movement, and brute muscle strength with manual muscle test before and after PT. Test- retest examination was conducted. Results.– In both group there was significant reduction of pain and improvement of functional ability (p<0.0001). Difference in pain evaluation before and after treatment was in group A 1.6 ± 0.70, and in group B 1.0 ± 0.71. Reduction in Lequesne index was 4.36 ± 1.75 in group A and 3.43 ± 1.74 in group B. Womac for pain was reduced in group A for 0.83 ± 0.51 and in group B 0.53 ± 0.40; for stiffness in group A 0.83 ± 0.46, and in group B 0.49 ± 0.44; for function in group A 0.61 ± 0.55 and in group B 0.38 ± 0.70. All differences were significantly better in group A. There were no changes in joint circumference and muscle strength was remotely improved, in average for half score in both groups.

Conclusion.– Therapy with continuous ultrasound in comparison with placebo showed significant efficacy in treatment of knee OA, because it leads to significant reduction of pain, stiffness and improvement of functional status.