2nd observation.– 62-year-old male admitted for a left knee operated on 29/09/2010 for tibial osteotomy, the radiographs of the knee after 6 months showed late healing with bone demineralization (CRPS type I). The two patients received treatment with bisphosphonates: intravenous Ibondronate (two cures 2 mg in 200 cc of serum to 1 month apart), they also received calcium and vitamin D supplementation. The outcome was favorable after 1 month with bone healing.

Conclusion.– Whatever the supportive care, the type of treatment used, and despite the measures of prevention, delayed healing is common after fractures of the tibia, the increased density of bone mineralization is proved after administration of bisphosphonates by inhibition of osteoclasts, but their effectiveness is unproven on bone healing.

Pour en savoir plus
L. Obert, A. Couesmes, D. Lepage, J. Pauchot, P. Garbuio, Y. Too much And Consolidation bone nonunion of long bones: the contribution of BMP: Department of Traumatology, Orthopaedic and Plastic Surgery Hospital Main Support Minjoz Bd Jean Fleming 25000 Besançon.
P. Chiron 1. A. Brouchet 2. Bone healing of bone adaptation to stress fundamentals, 1 orthopedic CHU Rangueil, 2 Pathology Rangueil.

P051_EN
The course of adhesive capsulitis in physical medicine and rehabilitation
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Keywords: Adhesive Capsulitis; Arthrodistention; Intraarticular infiltration

Objective.– The aim of our study was to assess the contribution of different therapeutic modalities in Physical Medicine and Rehabilitation for rapid improvement of adhesive capsulitis

Materials and methods.– This is a retrospective study conducted during the period from January 2009 to March 2011 in the service of Physical Medicine and Rehabilitation in the Institute of Orthopedics Kasass. Twenty-one cases of adhesive capsulitis, primitive (two cases) or secondary (four cases after shoulder trauma, one case after surgery of the rotator cuff, 11 cases due to diabetes, one case post-stroke and two cases of post-injury cap rotators) were included. The management has consisted in an intensive program of rehabilitation for two weeks, usually associated with complementary therapy by capsular distension or articular injection of corticosteroid. Treatment efficacy was assessed by VAS pain and the degree of joint mobility of the shoulder.

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.

P052_EN
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 Lekter’s scale for pain evaluation, and 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.