Methods Twenty nine patients with symptomatic OA of the knees and 37 – with SAC (more than 50% reduction of passive movements on all directions) were referred to chiropractic clinic following failure of long term conventional therapy (physiotherapy, NSAID's, local steroid injections). On admission very high proportion of each group (84% knees and 86% shoulder) were found to have "silent spondylosis": L2–4 or C5-T1 tenderness, paravertebral muscle spasm, and positive X-Ray for spondylosis. None had lumbar or cervical pain. Two-three chiropractic sessions per week (15 ± 11 sessions for knee OA and 10 ± 4 – for SAC) were applied to both the relevant spine and the affected joint (combined therapy).

Results The results (in percentage of patients) are presented in the Table 1. Once a month maintenance session may be necessary to establish long term results.

Abstract AB0148 Table 1

	Knee osteoarthritis (% of patients)	Adhesive capsulitis (% of patients)
Full pain relief	25	36
Full function rehabilitation	50	55
Decrease of 30% or more in pain	60	80
Initial 30% or more pain increase	25	13
Increase of pain by the end of the therapy	10	6
Reduction of pain (1–10 Score)	Not estimated	5.5 ± 3.5
Shoulder joint elevation angle enlargement (degree)	-	50 ± 36

Conclusion When direct therapy to knee or shoulder fails – "silent" spondylosis should be searched. Combined chiropractic therapy is highly effective in both situations.

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AB0149 STUDYING OF THE EFFICIENCY OF THE SYNVISK IN OSTEOARTROSIS

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Background At present for improvement of life quality in patients with osteoarthritis is necessary to solve some problems: precluding of development of degenerative process in cartilage of affected joint, relieving of pain and improvement of the function of the joint. For these aims we studied the efficiency of the chondroprotective drug Synvisk by Boehringer Ingelheim in 25 patients with arthrosis of the knee in medium age of $61,2 \pm 1,7$ years, 16 women and 8 men, with duration of the disease $5,8 \pm 0,9$ years. Conform X-ray data the distribution of the patients by

stages of the disease was as follow: I grade ? 20%, II grade ? 64%, and III grade ? 16%. In experimental group the drug was administered intraarticular by blind method in dose of 2,0 ml one time in a week, 3 injections for the course, which were repeated after 6 and 12 months. The control group was matched by gender, duration of disease and X-ray date; in this group was administrated placebo conforming same scheme.

Evaluation of the effectiveness and tolerability of compared drugs was carried out in evolution of clinical (pain, functional index by Lesquesne, volume of movement on affected joints), X-ray parameters and functional methods (ultrasonography, scintigraphy with ^{99m}Tc).

In the basic group were mentioned decreasing of the pain intensity and improvement of the joint functions after single injection in one third of the patients, while in control groups similar cases were absent. After 3 courses of the treatment in the basic group the effects were obtained in 86,7% of the patients, including 33,3% very good effect, in 53,4% moderate effect and only in 13,3% the effects were absent. In control group there were no effect in 80% of the patients, and in 20% of the patients there were mentioned moderate effects; good effects were are not observed. Thus, a presented result suggests that administration of Synvisk lead to significant improvement of the life quality in the patients with arthrosis of the knee.

Objectives

Methods

Results

Conclusion

AB0150 EFFECTS OF GLUCOSAMINE SULFATE AND NIMESULIDE ON THE PROGRESSION OF KNEE OSTEOARTHRITIS

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Background

Objectives The aim of this study was to assess the clinical, radiological and biological efficacy and tolerability of oral glucosamine sulfate associated with a selective COX 2 inhibitor, nimesulide, in patients suffering from Knee osteoarthritis (OA).

Methods There was a 6 month randomised, double blind study which included 35 patients of both sexes, aged between 45 and 72 years, with symptomatic knee OA, with Kellgren and Lawrence radiological scores I-II. Patients were treated only with oral glucosamine sulfate and 100 mg nimesulide daily or with a placebo (PBO) associated with 100 mg nimesulide per day. The main outcome criteria were the degree of spontaneous joint pain and the overall mobility capacity; secondary outcome criteria included the joint space measurement and the levels of biochemical markers of bone and joint metabolism (osteocalcin, deoxypyridoline, nitric oxide, matrix-metalloproteinases).

Results The results of this study confirm that the association glucosamine sulfate- nimesulide was well tolerated and both reduces significantly pain and increase overall joint mobility; a stabilisation of the femoro-tibial joint narrowing (measured with a digitised image analyzer) was noted in these patients, whereas joint narrowing space increased in placebo-treated patients. In addition, the metabolism of bone and joint assessed by different biochemical parameters also stabilised in patients receiving glucosamine sulfate and nimesulide combination, while remained unchanged in the PBO patients.

Conclusion The association glucosamine sulfate – nimesulide is effective and safe; glucosamine sulfate is an effective symptomatic and structure modifying slow acting drug for the treatment of knee OA, that may be able to stabilise the joint space width and to modulate bone and joint metabolism.

AB0151 DIPROSPAN EFFICACY IN PERIARTICULAR SYMPTOMS OF OSTEOARTHRITIS

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Background Complex clinical and instrumental investigations (kinesthesical method, electromyography (EMG), thermovision, ultrasonography) showed significant involvement (up to 80%) of periarticular structures (muscles, tendons) in osteoarthritis (OA) aggravating the clinical picture of the disease and leading to the decrease of life quality of the patients. The substrate of myofascial pain syndrome are local densities in muscular tissue and in the places of detachment of tendons to the bones.

Objectives The goal of investigation was to study the diprospan efficacy in treatment of 30 patients with OA with muscular syndrome. The treatment efficacy was estimated by Lee and Reachy indices of muscular syndrome, the volume of active and passive movements of joints and by EMG.

Methods In case of revealing of painful trigger zones in the muscles surrounding the joints we injected locally 1 ml of diprospan. In order to increase the volume of medication we added 5–10 ml of 0.5% novocaine solution into the syringe.

Results During the first 24–36 h after the periarticular injection of diprospan there was found decrease of myalgias and arthralgias. Further on the volume of movements in joints increased and functional activity of patients improved as well. No local side effects after periarticular diprospan injections were noted in contrast to kenalog injections. The diprospan injections were repeated if necessary depending on clinical picture of OA.

Conclusion Periarticular diprospan injections are effective and safe in patients with OA with myofascial pain syndrome.

OP0008 STRUCTURE MODIFICATION IN OSTEOARTHRITIS WITH INTRA-ARTICULAR SODIUM HYALURONATE OF MOL. 500–730 KDA

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Background Several Hyaluronan based products are available for intra-articular administration. These products differ in their composition and contain either natural hyaluronan of differing molecular weight or chemically crosslinked hyaluronan. Numerous clinical studies have shown that a series of 3–5 weekly intra-articular injections of hyaluronan of molecular weight 500–730 kDa (Hyalgan) reduces pain and improves function in patients with osteoarthritis of the knee and that this effect can be long lasting (6–12 months). Moreover, there is some evidence from pilot clinical studies to suggest that this product may slow osteoarthritis.

Objectives The primary objective of the present study was to examine the structure-modifying activity of intra-articular hyaluronan of molecular weight 500–730 kDa (Hyalgan).

Methods A multicentre, randomised, placebo-controlled, double-blind (masked observer) study in patients with primary knee osteoarthritis (ACR criteria) was conducted in 17 centres in the UK. The primary end point was the change in radiological joint space between baseline and one year in the medial tibio-femoral compartment, measured by digital image analysis. Weight-bearing antero-posterior radiographs were taken using a standardised technique. Patients were randomly assigned to receive 3 courses of 3 intra-articular injections of hyaluronan or 2 ml of placebo (saline solution) during the one year study. Uncontrolled use of analgesics and NSAIDs were allowed.

Results 408 patients with knee osteoarthritis (II-III Kellgren-Lawrence) were enrolled in the trial and 319 patients completed the one year study period. Mean patient age was 64.2 yrs (sd = 9.3), 68.4% of patients were female. The two groups, placebo and control, were comparable at entry for disease state and demographics. The change in joint space width between baseline and one year in the two groups was compared by analysis of variance. The group of patients with greater joint space at entry, treated with hyaluronan, showed statistically reduced progression of joint space narrowing. In the hyaluronan group the mean loss was only -0.22 (sd = 1.1), while in the placebo group the mean loss was -0.60 (sd = 1.1). This was statistically significant, $p < 0.05$.

Conclusion Repeat treatment cycles of intra-articular hyaluronan of molecular weight 500–730 kDa (Hyalgan) result in a statistically significant delay in radiological joint space narrowing within one year, in patients with osteoarthritis of the knee.

OP0048 A DOUBLE-BLIND, PLACEBO-CONTROLLED DOSE RANGING STUDY TO EVALUATE THE EFFICACY OF VALDECOXIB, A NOVEL COX-2 SPECIFIC INHIBITOR, IN TREATING THE SIGNS AND SYMPTOMS OF OSTEOARTHRITIS OF THE KNEE

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Background Valdecoxib is a novel oral COX-2 specific inhibitor being developed for the treatment of pain and inflammation, which does not cause the side effects commonly associated with the COX-1 inhibition of conventional NSAIDs.

Objectives The objective of this study was to evaluate the efficacy of multiple doses of valdecoxib in treating the signs and symptoms of osteoarthritis (OA) of the knee.

Methods In this multicenter, double-blind, placebo-controlled, parallel-group, dose-ranging study, 642 OA patients were randomised to receive valdecoxib 0.5, 1.25, 2.5, 5 or 10 mg BID, valdecoxib 10 mg QD, naproxen 500 mg BID, or placebo BID for 6 weeks. Patient's Assessment of Arthritis Pain (visual analogue scale, VAS), Patient's Global Assessment of Arthritis (VAS) and Western Ontario and McMaster Universities (WOMAC) OA Index were assessed at Baseline and after 1, 2, and 6 weeks of treatment. Vital signs and adverse events were monitored throughout the study.

Results Valdecoxib demonstrated efficacy that was significantly greater than placebo ($p \leq 0.05$) in all primary efficacy measures listed above, at every dose except 0.5 mg BID.