Background GI intolerance is one of the major causes of failure of NSAID treatment for arthritis patients. There has been a large number of studies to examine the risk of NSAID-induced GI side effects in US and Europe, but few studies in Japan.

Objectives In order to evaluate the GI tolerability of NSAIDs in OA patients in Japan, a systematic review of Japanese randomised controlled trials was performed.

Methods This meta-analysis consisted of double blind randomised controlled trials with 4-weeks NSAID treatment in OA patients in Japan. The analysis was composed of 25 trials with 26 types of NSAIDs, among which 6 types were used in more than two trials. The endpoints evaluated in the meta-analysis included incidence of any side effects, any digestive side effects and symptoms indicative of upper GI symptoms such as abdominal pain, nausea and dyspepsia. The general variance-based method was used to estimate the risk of these endpoints. Additionally, to evaluate the effect of risk factors for GI discomfort, odds ratios (ORs) of side effects by sex and age were estimated for individual treatment arms and then combined.

Results The analysis included a total of 4,725 patients. On average, cumulative incidences of patients who had experienced any side effects and any digestive side effects were 14.3% (95% CI: 13.3–15.3%) and 10.4% (95% CI: 9.4–11.4%), respectively. Incidence of any side effects by type of NSAID were as follows: diclofenac 75 mg/day, 19.9% (10 trials), indomethacin 75 mg/day, 16.2% (12 trials), acetaminophen 90 mg/day, 12.6% (2 trials), nabumetone 800 mg/day, 9.2% (2 trials), fenbufen 600 mg/day 8.8% (2 trials), and ibuprofen 900 mg/day, 7.8% (2 trials). Incidence of any digestive side effects were as follows: diclofenac, 16.6%, indomethacin, 10.2%, nabumetone, 8.3%, fenbufen, 6.9%, and ibuprofen 900 mg/day, 6.4%. Abdominal pain, nausea/vomiting and dyspepsia were the three most common digestive side effects. The cumulative incidence for the upper GI symptoms was estimated to be approximately 10.9%. Comparing the risk of upper GI symptoms between male and female, the summary OR was 1.71 (95% CI: 1.11–2.65). Females were at significantly higher risk than males in the incidence of upper GI symptoms. Comparing the risk of upper GI symptoms between patients under 59 years and above 60 years old, the summary OR was 1.07 (95% CI: 0.75–1.52).

Conclusion Despite the incidence of side effects varying across the different types of NSAIDs being used, there was an obvious increased risk of GI symptoms. Abdominal pain, nausea/vomiting and dyspepsia were the three most common GI discomforts and this trend is similar to the evidence in US and Europe. Females show a higher risk of side effects and are approximately 50% more likely to have side effects compared to males. Older patients tend to have a higher risk of side effects, but this is not statistically significant.

SAT0066 STUDYING OF THE EFFICIENCY OF THE SYNVIK 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.

Objectives

Methods 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 ± 1.7 years, 16 women and 8 men, with duration of the disease 5.8 ± 0.9 years.

Results 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 administered 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 not observed.

Conclusion 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.

SAT0067 SERUM CARTILAGE OLIGOMERIC MATRIX PROTEIN (COMP) AS A PROGNOSTIC MARKER IN KNEE OSTEOARTHRITIS

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Background Three previously published studies aimed to relate radiographic disease progression in OA to baseline serum COMP levels (1–3). In two studies, the authors found no correlation between baseline serum COMP levels and subsequent progression of knee osteoarthritis (OA).^{1,2} In the study of hip OA, however, the authors found significant correlation between baseline serum COMP levels and yearly mean narrowing of joint space width.³

Objectives To evaluate serum COMP level measured at baseline with a new sandwich ELISA as a predictor of disease progression of knee OA.

Methods Patients with established OA (n = 54) represented placebo-taking group from finished and now opened 3-years long double-blind drug trial. Standing antero-posterior radiographs of both knees were taken at the beginning and at the end of the study and used to measure joint space width at the medial compartment. COMP was quantified by newly developed sandwich ELISA with monoclonal antibodies 16-F12 and 17-C10.

Results The increased serum COMP level at baseline correlated with 3-years change of joint space width (expressed as the sum

of joint space narrowing in both knees) (linear regression, $r = 0.315$, $p < 0.05$).

Conclusion We were able to relate serum COMP levels measured at baseline with the new assay to the radiographic progression of knee OA and extend the findings of Conrozier *et al.*³ from hip also to knee OA. At present, serum COMP level cannot be used to prognosticate OA course in individual patients due to high variability and overlap of values but it may help in sorting out groups of patients which are at risk of more aggressive development.

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SAT0068 INTRA-ARTICULAR Hylan GF20 (SYNVISC) IN THE MANAGEMENT OF PATELLOFEMORAL OSTEOARTHRITIS OF THE KNEE (POAK)

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Background Anterior knee pain and patellofemoral osteoarthritis of the knee (POAK) are disabling and often difficult to manage. Intra-articular (IA) hyaluronate reduces pain in patients with tibiofemoral disease but its effect in POAK has not been studied prospectively.

Objectives To make a preliminary assessment of the potential effect of IA Hylan GF20 (Synvisc) on patients with isolated POAK.

Methods Out Patients aged more than 35 years with anterior knee pain and predominant POAK on plain radiographs, MRI or arthroscopy were recruited to an uncontrolled, prospective pilot study. Patients with significant tibiofemoral disease were excluded. Patients received 2 ml of IA Hylan GF20 on 3 successive weeks. The primary outcome was change in the patients' global assessment of their disease on a 100 mm visual analogue scale (VAS). Secondary outcome included WOMAC, and Oxford Outcome Score. Data were collected at baseline, 5, 12 and 26 weeks.

Results Of the 39 enrolled patients 31 have radiographic (joint space narrowing) POAK and the remainder MRI (6) or arthroscopic (2) evidence of POAK but normal radiographs. The mean (95% CI) age is 56 (3.5) years and BMI 30 (1.9), 22 are women and 28 have currently reached 26 weeks. Mean patients' global assessment was reduced from 64 (7.1) at entry to 47 (10.3), 37 (10.0) and 40 (11.7) at each time point and these changes were significantly different from baseline (paired T-test: $P = 0.001$, 0.00004, 0.006 respectively). 15/28 (54%) cases improved by >20 mm VAS at 26 weeks. Significant changes also occurred in pain on stair climbing (WOMAC Question A2: 77.6, 52.3, 51.3, 50.1) and Oxford Outcome Score (Total Score: 36.1, 32.9, 31.0, 30.9). Adverse knee events followed 16 of 116 injections but only two patients were unable to complete the course of injections.

Conclusion The apparent clinical benefit of Hylan GF20 persists to 26 weeks, beyond that expected of IA glucocorticoids. These positive data on the effect of Hylan GF20 in POAK suggest a randomised controlled trial be performed.

SAT0069 SAPHO SYNDROME

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Background The acronym SAPHO (synovitis, acne, pustulosis, hyperostosis, osteitis) was first introduced by Chamot *et al.* in 1987.¹ The syndrome is characterised by variable bone involvement, with or without concurrent pustular dermatoses. The affected bones include the chest wall (clavicle, sternum, sternoclavicular joints), sacroiliac joints and long bones. Bone changes include hyperostosis, aseptic osteomyelitis and arthritis.

Skin diseases include palmoplantar pustulosis, acne conglobata or acne fulminans and hidradenitis suppurativa.

Objectives To determine the frequency of clinical and bone scintigraphic changes in patients with SAPHO syndrome.

Methods Authors analyse the clinical and radiological findings and outcome of the disease in 6 cases of SAPHO syndrome (3 males, 3 females) between 1997 and 2000 retrospectively.

Results Authors treated 6 cases with SAPHO syndrome between 1997 and 2000 of whom 3 patients suffered from acne fulminans and 3 patients from palmoplantar pustulosis. Acne fulminans was found exclusively in young males (mean age: 20 years) including one patient who suffered from inflammatory bowel disease (ulcerative colitis). Sacroileitis was found in all acne patients, and 2 cases had chest wall arthroostitis and peripheral arthritis also. The joint involvement was preceded by the acneiform eruption. Treatment with isotretinoin was suspected playing a role in the development of joint involvement in 2 cases. All patients with palmoplantar pustulosis were middle-aged women (mean age: 45 years). All of these 3 patients suffered from anterior chest wall involvement and one had peripheral joint symptoms. The diagnosis of SAPHO syndrome based on clinical symptoms, laboratory findings (elevated erythrocyte sedimentation rate, leukocyte count, and C-reactive protein), and the results of the bone scintigraphy. Bone scintigraphy is an important examination which can reveal the early pathologic signs when the X-ray examinations are still negative.

Conclusion Bone scintigraphy is a sensitive examination in the early diagnosis of the SAPHO syndrome. Cases with acne fulminans have more favourable prognosis, whereas cases with palmoplantar pustulosis have a chronic course.

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SAT0070 KNEE OSTEOARTHRITIS (KOA) AND VARICOSE VEINS (VV): A CASE-CONTROL STUDY OF 600 PATIENTS

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Background KOA and VV are two frequent diseases increasing with age, especially in women. Age, sex, BMI, standing position