present, IL-1ra levels were in the intermediate range ($n = 42$; mean: 626 pg/ml).

Conclusion IL-1ra deficiency appears to predispose patients to a more aggressive disease course of rheumatoid arthritis, whereas in other patients synovial IL-1ra production in response to increased IL-1 activity represents a physiological mechanism to restore the balance between pro-inflammatory and anti-inflammatory activity.

THU0213 THE IMPORTANCE OF SCREENING AND SPINAL INSTRUMENTATION IN PATIENTS WITH INSTABILITY OF UPPER CERVICAL SPINE DUE TO RHEUMATOID ARTHRITIS

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Background Instability of cervical spine is one of the most challenging fields in patients with rheumatoid arthritis (RA). Although most of the patients can be treated conservatively, some experience intractable pain with pronounced neurological symptoms. Sudden death has been reported in 10% of cases.

Objectives Aim of this study was to determine the importance of screening of patients with RA and cervical spine instrumentation, which restores spinal stability before onset of cervical myelopathy.

Methods We retrospectively evaluated 17 patients surgically treated for instability of the upper cervical spine during 1996 – 2001. Average age was 53.2 years (22 – 72), average duration of the disease was 14 years (3 – 24), 16 patients were women. There were 4 patients with cranial settling combined with atlanto-axial or/and subaxial instability and 13 with atlanto-axial instability; one of these patients had associated lateral atlanto-axial instability. Screening included electrophysiological examination, dynamic x-rays, in cases of significant instability MRI is performed in order to determine possible compression of the dural sac by pannus as described by Dvorak. The indications for surgery are: growing neurological deficit or pain, cranial settling, lateral subluxation of C1-C2 more than 2 mm and retrodental interval in patients with atlanto-axial subluxation 14 mm or less. Four different instrumentations were used, Ransford loop with sublaminar wires and cables, transarticular screws with wire loop, double sublaminar loop (Brooks) and Cervifix. All patients were using soft collar postoperatively, the one with Brooks procedure was placed into halo-vest for 6 weeks.

Results Patients were evaluated using functional rating score and the Visual Analogue Scale with the mean follow up 14.3 months (6–46). Marked improvement was found in both evaluations.

Complications included cerebrospinal fluid leak, which required revision, delayed wound healing, injury to vertebral artery and delayed union of spinal fusion. Although they required longer hospital stay, they were not clinically significant.

Conclusion Our results support the need for careful screening of patients with RA, which reveals instability associated with early neurological signs. Indication for surgery should be done before the onset of cervical myelopathy. Internal fixation with Cervifix, Ransford loop and transarticular fixation according to Magerl were satisfactory in maintaining stability of the upper cervical spine before healing of the fusion. Stability of the Brooks procedure was not satisfactory and therefore the patient had to be placed into halo-vest orthosis.

Rheumatoid Arthritis – Treatment

AB0055 SULPHASALAZINE IN THE TREATMENT OF RHEUMATOID ARTHRITIS: A 2 YEAR PROSPECTIVE STUDY

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Background Sulphasalazine has been suggested as a less effective drug than some of the other disease modifying antirheumatic drugs (DMARDs). It is more suitable for use in milder disease. Sulphasalazine is often the most common first-choice DMARDs because of its good tolerability.

Objectives The aim was to determine the efficacy and tolerability of long-term sulphasalazine treatment of rheumatoid arthritis (RA).

Methods This study examines the response to sulphasalazine (2,0 – 3,0 g daily) over a 2 year period in 40 consecutive patients with severe, active RA. This was defined as seropositive, erosive RA and persistent activity. Clinical evaluation were performed by the same physician every 3 months and also blood count, erythrocyte sedimentation rate (ESR), serum creatinine, liver blood test and urine were obtained.

Results 40 patients were enrolled in the study. Their mean age at entry to trial was $51,2 \pm 11,6$ years with a mean duration of disease activity of 4 years. After 3 months of the treatment 21 patients showed no significant clinical improvement. A good clinical response was shown by the improvement of the pain, as well as the reduction of the morning stiffness. Reduction in the acute phase response was shown by improvement in the ESR and C-reactive protein (CRP). Of the 40 patients enrolled in the study, 27 showed highest improvement in swollen joints ($p < 0,01$), in the duration of morning stiffness ($p < 0,01$), ESR ($p < 0,05$), CRP ($p < 0,05$) after 6 months compared to pretreatment values. 2 patients were excluded from study because of an leukopenia, and gastrointestinal disturbances and in 2 the drug was ineffective.

Conclusion This study confirmed that sulphasalazine is well tolerated and suggests that patients with severe and active RA could achieve good clinical response to sulphasalazine.

AB0056 THE TIMING OF LOW DOSE GLUCOCORTICOID THERAPY ADMINISTRATION IN TREATMENT OF RHEUMATOID ARTHRITIS

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Background

Objectives This study was performed to determine the effects of low dose prednisolone in treatment of rheumatoid arthritis (RA), administered in the morning or at night.

Methods Thirty patients with active RA are divided randomly into two groups. For 6 months, a dosage of 7.5 mg/day prednisolone was administered at 02:00 am or 07:30 am to group I and group II respectively. In both groups, evaluations are performed between 07:30 – 08:00 am. During the treatment, changes observed each month in clinical and laboratory status of

patients in both groups were recorded and results were compared both within and between the groups.

Results Significant improvements were observed in both groups in morning stiffness, joint pain, Ritchie articular index, serum CRP and ESR levels compared to values before treatment, beginning from first month to sixth month ($p < 0.001$). In the functional assessment; significant improvements were observed in both, determined beginning from the first month to sixth month compared to before treatment both in group receiving a night dose prednisolone and morning dose prednisolone ($p < 0.05$). In comparison of morning stiffness, joint pain, Ritchie articular index and its functional assessment, and serum CRP and ESR levels in both groups, no significant difference was obtained from first month to sixth month ($p > 0.05$).

Conclusion Low dose prednisolone therapy in treatment of RA significantly suppresses the activity of disease beginning from the first month. This condition is kept until the sixth month. However, administration of the medication either given at morning hours classically or at night according to the diurnal rhythm of disease activity doesn't affect the results of the treatment.

AB0057 POSTOPERATIVE ARTHROCENTESIS AND LAVAGE OF THE KNEE JOINT IN PATIENTS WITH RHEUMATOID ARTHRITIS AND OSTEOARTHRITIS

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Background The postoperative arthrocentesis (PA) and lavage (L) usually have an obligatory character after preformed arthroscopic synovectomy (AS) and debridement in RA or OA knee joints synovitis.

Objectives The aim of the study is to establish the effect of the postoperative arthrocentesis and lavage within 7 days after an arthroscopic synovectomy and debridement of the knee joint in RA and OA patients. The arthroscopic synovectomy was performed in the Clinic of Rheumatology in Plovdiv.

Methods The study includes 127 patients (73 RA and 54 OA knees). After the synovectomy a tidal lavage was done with 4–5L saline (Arthrotek-BiometInc. USA). During the early postoperative period within 7 days in case of a significant hydrops, tenderness and pain of the knee joint, an arthrocentesis was performed followed by an evacuation of the synovial fluid and lavage with 60–100 mL saline.

Results Postoperative arthrocentesis and lavage was performed in all patients investigated as presented on Table 1. In 16 patients a single arthrocentesis, in 67 patients double and in 44 patients triple arthrocenteses in the early postoperative period were needed. Improvement of the range of motion was detected in all patients but a marked improvement was establish in the single procedure patients compared to those with triple ($p < 0.001$).

Abstract AB0057 Table 1

	1st day	2nd day	3rd day	4th day	5th day	6th and 7th day
Day of PA and L	31	90	70	60	20	3

Conclusion In the patients who underwent an arthroscopic synovectomy of the knee joint was necessary to be performed most frequently two or three times postoperative arthrocenteses and

lavage. An early improvement of the range of motion, as well as a postoperative recovery are achieved, especially in the single procedure RA and OA patients.

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AB0058 CYTOPENIA ASSOCIATED WITH LOW DOSE PULSE METHOTREXATE IN THE TREATMENT OF RHEUMATOID ARTHRITIS

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Background MTX has gained wide acceptance of the most useful disease-modifying anti-rheumatic drugs. But, MTX cause serious toxicities including hepatic abnormalities, pneumonitis, and myelosuppression.

Objectives To assess the associated risk factors of methotrexate (MTX)-induced cytopenia in rheumatoid arthritis (RA).

Methods We followed 420 patients started on MTX for RA. We evaluated the frequency and clinical significance of patients with cytopenia related to MTX therapy.

Results The prevalence of patients remaining in the follow-up in the MTX treatment was 21% at 60 months. A total of 10 patients with cytopenia related to MTX therapy were identified among them. The prevalence of cytopenia, including leukopenia ($n = 6$), thrombocytopenia ($n = 3$) and pancytopenia ($n = 1$), estimated to be 2.4% in MTX treated RA patients.

Patients with cytopenia received 2.5–8 mg/w over a mean duration of 60.0 months (10–119 months). Nine of 10 patients received NSAIDs with MTX therapy. The presence of renal abnormality ($\text{Cr} > 1.2 \text{ mg/d}$) was in 3 cases, age over 70 years old in 4 patients, body weight under 50 kg in 8 patients, mean corpuscular volume (MCV) over 100 fl in 2 patients. High MCV value (over 94 fl) was in 7 patients, 6 of whom had some symptoms including fever ($n = 3$) and oral mucosa/lip abnormalities ($n = 3$). Low MCV value (under 84 fl) was in 3 patients, who had no symptoms but arthralgia and no renal abnormality. And they were younger and received MTX in shorter period than high MCV group.

Conclusion In patients with high MCV (over 94 fl), most haematological toxicities seen during the course of MTX therapy can be predictable. But, some patients may develop unpredictable haematological reaction.

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