Background Etanercept is an efficient treatment of Rheumatoid arthritis (RA), but the effect on extraarticular features remains unknown.

Objectives To evaluate the efficacy of etanercept on extraarticular features of RA.

Methods We looked for tenosynovitis, rheumatoid nodules in 87 patients (70 women, 17 men) with RA or juvenile rheumatoid arthritis (JRA), at day 0, before beginning treatment with Etanercept (25 mg twice a week) and at day 180 of treatment. The population included 82 cases of RA and 5 cases of JRA, rheumatoid factor positive in 64 cases, median age 51 years (7–76). The median duration of RA was 11 years (2–32) and the median number of previous treatments was 5 (1–10).

Results The evolution of the median value of modified DAS 28 was highly significant, with a score of 4.0 at day 0 and 1.7 at day 180 ($p = 0.01$). At day 180, 72 patients could be assessed for the 3 parameters studied. At day 0, 72 patients out of 87 had tenosynovitis. All tenosynovitis disappeared in 12 patients, some but not all tenosynovitis disappeared in 7 patients. New tenosynovitis appeared at day 180 in 8 patients, 45 patients remained unchanged.

Moreover, 22 nodules were counted in 10 patients out of 87 assessed at day 0. At day 180, the assessment remained unchanged. Nodules neither appeared nor disappeared. No other extraarticular features appeared during treatment.

Conclusion Etanercept is an effective inhibitor of TNF α providing clinical and biological improvement in both RA and JRA. However, Etanercept had no efficacy on tenosynovitis and rheumatoid nodules.

FRI0020 RADIAL HEAD EXCISION IMPROVED FLEXION CONTRACTURE IN ELBOW SYNOVECTOMY WITH RHEUMATOID ARTHRITIS

T Oshige, H Tsurukami, A Sakai, N Okimoto, T Nakamura. *Department of Orthopaedic Surgery, University of Occupational and Environmental Health, Japan, Kitakyusyu, Japan*

10.1136/annrheumdis-2001.1149

Background Swett¹ was the first to report a successful elbow synovectomy in chronic infection arthritis. Smith-Petersen *et al.*² added radial head excision for rheumatoid arthritis elbow synovectomy. However, the usefulness of radial head excision in elbow synovectomy was controversial.

Objectives This study was designed to clarify the usefulness of radial head excision in elbow synovectomy with rheumatoid arthritis.

Methods We performed elbow synovectomy for 19 patients (21 elbows) suffering from rheumatoid arthritis. There were 14 women and 5 men. Radial head excision (E group) was added in 7 patients (7 elbows) and radial heads retain (R group) was in 12 patients (14 elbows). Average age at the time of the surgery was 51.4 years in E group, and 52.8 years in R group. The follow up period averaged 6.4 years in E group and 9.1 years in R group.

We evaluated clinical results and radiological parameters preoperatively and final examination. Clinical results were evaluated include pain, range of motion, stability.

Pain score was classified 4 stages. (0: no pain, 3: severe pain). We defined instability as more than 20 degrees of varus-valgus motion with the elbow flexed 25 degrees. Radiographic parameters were measured the height of humerus (H) in anteroposterior radiograph, the thickness of olecranon (O) in lateral. The degree

of joint destruction was elucidated by Larsen grade. We compared with preoperative and final examination in each group. Statistical analysis was performed by Wilcoxon signed-ranks test. A p value of less than 0.05 was considered to indicate a significant difference.

Results Pain was eliminated or improved in all patients at final examination. The average pain score changed 2.7 to 0.7 in E group and 2.5 to 0.3 in R group. The flexion contracture preoperatively was -42.5 degrees, and significantly improved to -26 degrees at final examination in E group. In R group, it was not significantly improved from -35.7 degrees to -30.1 degrees. The arc of flexion did not change after synovectomy both two groups (115 to 124 in E group, 122 to 115 in R group). One elbow in each group was considered to be unstable at final examination.

Larsen grade had deteriorated 1 grade or more in all elbows of each group. The value of H significantly decreased 8.4 mm to 3.9 mm in E group and 11.0 mm to 6.2 mm in R group. The value of O was significantly decreased 12.8 mm to 10.0 mm in E group and 13.7 mm to 11.7 mm in R group.

Conclusion Radial head excision improved flexion contracture without influences on pain, stability and radiographic change in elbow synovectomy with rheumatoid arthritis.

REFERENCES

- Swett PO. Synovectomy in chronic infection arthritis. *J Bone Joint Surg* 1923;3:110
- Smith-Petersen MN, *et al.* Useful surgery procedures for rheumatoid arthritis involving joints of the upper extremity. *Arch Surg.* 1943;46:764–70
- Brumfield RH, *et al.* Synovectomy of the elbow in rheumatoid arthritis. *J Bone Joint Surg.* 1985;67-A:16–20

FRI0021 COMBINATION THERAPY WITH CYCLOSPORIN-A AND METHOTREXATE IN PATIENTS WITH EARLY POTENTIALLY AGGRESSIVE RHEUMATOID ARTHRITIS, A RANDOMISED DOUBLE BLIND PLACEBO CONTROLLED TRIAL

¹AH Gerards, ²RB Landewé, ¹AP Prins, ³GA Buijn, ²HS Goei Thè, ¹BA Dijkman. ¹Rheumatology, Vrije Universiteit Medical Centre, Amsterdam; ²Rheumatology, University Hospital Maastricht, Maastricht; ³Rheumatology, Medical Centre Leeuwarden, Leeuwarden, The Netherlands

10.1136/annrheumdis-2001.1150

Background Patients with advanced RA with a suboptimal response on low dose methotrexate (MTX) have shown to respond well after the addition of cyclosporin-A (CsA).¹ The combination of CsA and MTX has never been tested in a parallel design in patients with early RA.

Objectives To assess in patients with early, and potentially aggressive RA whether combination therapy with CsA and MTX compared to CsA mono therapy, results in a higher number of clinical improvements.

Methods 120 RA-patients with active disease who were rheumatoid factor positive (95%) and/or had signs of radiological damage (49%) received CsA and MTX or CsA and placebo for 48 weeks. MTX was started at a dose of 7.5 mg/week, and increased to 15 mg/wk at week 16. CsA was started at a dose of 2.5 mg/kg/day and increased to a maximum of 5 mg/kg/day. Patients who did not have an ACR20 response after 24 weeks were withdrawn. ACR responses at the 20%, 50% and 70% levels were calculated on basis of intention to treat with the last visit put forward in case of premature discontinuation.

Results Baseline demography was comparable between the two groups. 26 patients in the CsA and MTX group and 27 patients in the CsA and placebo group stopped study medication because of lack of efficacy (14 vs. 21, $p = 0.23$) or adverse events (12 vs. 6, $p = 0.20$).

Data from week 48 are shown in the Table 1.

Abstract FRI0021 Table 1

	ACR 20	ACR 50	ACR 70
CsA and MTX (n = 56)	34(61%)	29(52%)	12(21%)
CsA and placebo (n = 59)	28(47%)	15(25%)	5(8%)
Chi-Square	$p = 0.15$	$p = 0.004$	$p = 0.05$

Conclusion In patients with early, potentially aggressive RA, CsA and MTX combination therapy, compared to CsA mono therapy, results in a higher number of major clinical improvements.

REFERENCE

- 1 Tugwell, et al. NEJM 1995;333:137-41

FRI0022 ACTH THERAPY IN RHEUMATOID ARTHRITIS: IS THERE ANY PLACE OF IT?

GP Balint, B Rojkovich, J Korda. *Rheumatology IV., National Institute of Rheumatology and Physiotherapy, Budapest, Hungary*

10.1136/annrheumdis-2001.1151

Background

Objectives To evaluate the effect, efficacy and side effects of a single injection of i.m. ACTH (2 mg of tetracosactide) in RA patients requiring steroid treatment.

Methods In a pilot study 11 RA patients, fulfilling the ACR criteria were treated with a single i.m. injection of 2 mg of tetracosactide (Cortrosyn depot, Organon) in an open trial. All patients were female, with the average age of 48,9 years, disease duration of 5,2 years. 4 patients have a disease duration less than one year, 5 received also 5-7,5 mg daily prednisolon treatment. None of the four patients with disease duration less than one year had any DMARD treatment, but all the others had. Patients with hypertension, diabetes, know hypersensitivity to drugs, inclination to water retention were excluded. Joint pain (VAS), number of tender and swollen joints, duration of morning stiffness and patients' global assessment were measured before the injection and on the 3rd, 7th, 14th, 21st, 28th days thereafter. CRP levels were also measured.

Results All clinical parameters and the CRP level improved significantly ($p < 0,005$) on the 3rd, 7th and 14th day, but on the 21st and 28th days there was no significant difference as compared with the initial values. There was no difference in respond-rate between prednisolon treated and non-treated patients. Side effects: slight elevation of blood pressure was observed in 5, water retention in 2 patients in the first 3-4 days. The side effects were considered as unacceptable in one patient having blood pressure elevation up to 170/100 Hgmm and water retention. Out of the 4 patients with disease duration less than one year, 3 patients had continued ACTH treatment by administering 2 mg-s of tetracosactide in 1-3 week's intervals, as bridging therapy. Two other patients on DMARDs still receive ACTH injections, one of them monthly and the other bimonthly.

Conclusion ACTH treatment of RA may be reassessed, especially in young patients requiring bridging therapy or continuous steroid treatment. It may correct the slightly deficient hypothal-amo-pituitary-adrenal axis in RA patients and may prevent drug-induced hypadrenia.

FRI0023 LABORATORY TESTING IN RHEUMATOID ARTHRITIS PATIENTS ON DISEASE MODIFYING ANTIRHEUMATIC DRUGS: CLINICAL EVALUATION AND COST ANALYSIS

D Aletaha, JS Smolen. *Department of Internal Medicine III, Division of Rheumatology, University of Vienna, Vienna General Hospital, Vienna, Austria*

10.1136/annrheumdis-2001.1152

Background Laboratory tests during disease modifying antirheumatic drug (DMARD) therapy are necessary to ensure that certain adverse events are not present,^{1,2} but often are costly. Current guidelines on monitoring DMARD therapy are mostly derived by consensus.³

Objectives To assess the value and costs of routine laboratory tests for the detection of toxicity of DMARD-therapy in rheumatoid arthritis, and to find evidence-guided proposals concerning types and frequencies of such tests.

Methods Data were collected from the outpatient charts of 362 RA-patients during 1386 patient-years (DMARD type, dosage, duration, reason for discontinuation and all details of adverse events). Clinically relevant laboratory abnormalities (mainly ALAT, ASAT, CBC, creatinine, protein excretion) were analysed to assess the effectiveness of laboratory tests in detecting abnormalities induced by DMARDs. On this basis, proposals were derived and then tested using data from a validation cohort of 231 patients (986 patient years) from another rheumatic disease centre. Cost analyses were performed using a cost catalogue.

Results Abnormal results of laboratory examinations accounted for approx. 10% of DMARD discontinuations. All significant abnormalities occurred or were heralded during the first 4 months of therapy. It was concluded that laboratory examinations could be limited to a small number of variables for individual DMARDs and that after the initial 4 months of therapy screening frequencies could be significantly reduced. These conclusions were proved to be correct in 98.3% of the independent second patient cohort. Adhering to such strategy could save up to 86% of costs incurring compared to published recommendations for monitoring DMARD therapies.

Conclusion Only a limited number of laboratory tests are necessary for safety monitoring of patients on DMARDs. These tests need to be performed more frequently (monthly) only in the first four months of therapy, and if not revealing abnormal results, examinations can thereafter be reduced to two to four times per year. Thus, the costs of routine laboratory tests during DMARD therapy can be significantly decreased with no increase in the risk of overseeing adverse events.

REFERENCES

- 1 Fries JF, Williams CA, Ramey D, Bloch DA. The relative toxicity of disease-modifying antirheumatic drugs. *Arthritis Rheum.* 1993;**36**:297-306
- 2 Wolfe F. Adverse drug reactions of DMARDs and DC-ARTs in rheumatoid arthritis. *Clin Exp Rheumatol.* 1997;**15**(Suppl 17):75-81
- 3 American College of Rheumatology Ad Hoc Committee on Clinical Guidelines. Guidelines for monitoring drug therapy in rheumatoid arthritis. *Arthritis Rheum.* 1996;**39**:723-31