56 (21%), and miscellaneous other disorders in 65 (24%). The OBR confidence in their final diagnosis of RA was 7.5 ± 2.3 (68/114 patients with a confidence of 8/10 or more). A collegial diagnosis of certain RA (N = 57) or probable RA (N = 41) was made for 98 patients. The strength of OBR confidence in the diagnosis of RA was strongly correlated to that of the college ($r = 0.892$). Conversely, the fulfilment of 4 ACR criteria for RA since the first visit was associated with an only slight increase in final OBR confidence (7.9 ± 2.1).

Conclusion Although only 13/114 (11%) patients finally classified as RA changed from diagnosis during follow-up, the final confidence of OBR in their diagnosis of RA were below 8/10 in 40%, and was only slightly improved by the fulfilment of ACR criteria. This emphasises the need for a close follow-up of these patients during the first years and the use of RA criteria for the classification of early arthritis.

THU0137 LETHAL MEDIUM-VESSEL ARTERITIS MIMICKING DEEP SEPSIS FOLLOWING ETANERCEPT AND MINOCYCLINE THERAPY IN A PATIENT WITH RA

JM Berthelot, J Glemarec, Y Maugars, A Prost. *Rheumatology Unit, Hôtel-Dieu, Nantes, France*

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Background

Objectives To report the onset of a severe and lethal medium-vessel panarteritis mimicking deep sepsis three weeks after etanercept withdrawal and minocycline therapy in a patient with RA.

Methods

Results A 50-year-old man with RA (7/7 1987 ACR criteria) had poorly responded to all DMARDs and low-dose steroids for 12 years. In September 1999, DAS-28 score of 6.8 led to a treatment by etanercept (25 mg twice a week) for 4 months who remained poorly effective too (DAS-28 after 3 months: 6.05). Although no side-effects occurred, the patient wished to stop etanercept. A short cure by minocycline was administered. Ten days after, the patient's general condition worsened with fever (from 38°C to 39°C), hyperleukocytosis (24.109/ml), confusion, pleural effusion, hypoalbuminemia (17.2 g/l), epigastric pain, and CRP levels up to 295 mg/l. ANA and APL were negative, and ANCA only slightly positive (1/20, without anti-MPO antibodies). RF were 40 times the upper normal value. Extensive search for sepsis was unsuccessful. Highly false positive tests for myoglobin with ELISA kits using rodent antibodies were suggestive of anti-chimeric antibodies. The patient died in March 2000, three months after discontinuance of etanercept. An autopsy confirmed severe plurivisceral vasculitis typical of granulomatous, necrotising panarteritis, with both old and recent lesions involving mainly the medium-vessels in heart, muscles and gall-bladder.

Conclusion Although the relation of the patient's death to treatments is uncertain, a flare of rheumatoid vasculitis could have been involved. This severe vasculitis occurring soon after etanercept withdrawal and presenting first as unexplained fever mimicked deep sepsis for several weeks and misled the treatment strategy.

THU0138 THE ACUTE PHASE RESPONSE DOES NOT FULLY EXPLAIN DYSLIPIDEMIA AND INSULIN RESISTANCE IN INFLAMMATORY ARTHRITIS

¹PH Dessein, ²BI Joffe, ¹AE Stanwix, ³Z Moomal. ¹Rheumatology, ²Carbohydrate and Lipid Metabolism Research Unit, Witwatersrand University/Johannesburg Hospital, Johannesburg; ³Statistics, National Research Foundation, Pretoria, South Africa

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Background An increased frequency of insulin resistance (IR) and dyslipidemia has been identified in inflammatory arthritis (IA). These metabolic disturbances may be attributable to disease activity and were implicated in the excess cardiovascular disease mortality as reported in IA.

Objectives In the present study we evaluated insulin sensitivity and lipid metabolism, as well as the potential role of the acute phase response as a predictor of these metabolic disturbances in IA.

Methods Eighty seven patients (38 rheumatoid arthritis, 29 spondyloarthropathy, 20 undifferentiated inflammatory arthritis) and 30 age-, gender- and race matched healthy controls (CN) were enrolled. Patients who had taken glucocorticoids during the previous 2 months or were taking agents known to affect insulin sensitivity or lipid metabolism were excluded. The body mass index (kg/m^2) was calculated in each subject. The erythrocyte sedimentation rate (ESR), plasma glucose, serum insulin and total cholesterol (chol), LDL-chol, HDL-chol and triglycerides were determined on fasting blood samples. IR was estimated by the homeostasis model assessment (HOMA). Results were expressed as mean (SD).

Results The BMI was 26.5 (4.2) in the patients and 22.9 (2.8) in the CN ($p < 0.001$). The HOMA (uU.mmol/ml.l) was 1.9 (1.3) in patients as compared to 1.1 (0.5) in CN ($p = 0.001$). The HDL-chol was lower ($p = 0.002$) and the total chol/HDL-chol was higher ($p < 0.001$) in patients as compared to CN. Only after controlling for the BMI in addition to the ESR, was the HOMA no longer different between patients and CN. The ESR and HOMA, but not the BMI, significantly predicted ($p < 0.05$) high chol/HDL-chol ratios. However, after controlling for these variables, this lipid parameter remained different in patients as compared to CN. Also, IA was associated with a positive family history for premature coronary artery disease ($p < 0.03$).

Conclusion Metabolic disturbances were identified in the majority of our patients and should therefore be addressed in the management of IA. IR could be attributed to the acute phase response and excess weight. However, dyslipidemia was associated with IA independent of the ESR, BMI and IR. Dyslipidemia may constitute a risk factor for IA.

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THU0139 THE EFFECT OF INCREASED AIR PRESSURE ON PATIENTS WITH ACTIVE RHEUMATOID ARTHRITIS

¹LP Robertson, ²S Marshall, ²P Hickling. ¹Department of Rheumatology, Royal Cornwall Hospital, Truro, UK; ²Department of Rheumatology, Derriford Hospital, Plymouth, UK

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Background

Objectives A pilot study to assess the effect of increased air pressure in a hyperbaric chamber on patients with active rheumatoid arthritis.

Methods Seven out-patients with active rheumatoid arthritis (RA) and taking at least one disease modifying anti-rheumatic drug (DMARD) entered a hyperbaric chamber for 30 min. Patients were randomised to control and test groups and assessed in a double-blind fashion. The test group had the atmospheric pressure increased to 2 atmospheres. The control group did not have the pressure altered. Active disease was defined as a pain score on a 100 mm visual analogue scale (VAS) greater than 60 mm and 3 out of 4 from the following: – ESR >28 mm/hr, >6 swollen joints, >6 tender joints and early morning stiffness >45 min. The following were recorded or measured: pain score (by 100 mm VAS), number of swollen joints, number of tender joints, patients global score on a 100 mm VAS, ESR and CRP. The above measurements were repeated 30 min after leaving the hyperbaric chamber, the following day and 7 days later. Disease Activity Scores (DAS) were calculated using the DAS 28.

Results Four female and three male patients participated. Mean age was 58.4 years (range:41–71 yrs), mean disease duration 10.86 yrs (4–20 yrs). In the test group the pain score of 1 patient was reduced by 60% and DAS by 38% at 24 hrs but had returned to the pre-test values by 7 days. Pain scores from the other 2 patients did not alter. In the control group the pain scores of 2 patients had fallen by 60% and 64% and at 30 mins post-test. This effect was maintained to 7 days for the latter patient whose DAS fell by 54% and at 24 hrs for the former patient whose DAS did not change, however, this patient's oral steroid dose was inadvertently altered between the 24 hr and 7 day assessment. All patients in the test group had reduced swollen joint counts at 30 mins and 24 hrs post-test, this was maintained at 7 days in 2 patients; the tender joint count was reduced in 1 patient at 24 hrs only. 3 out of the 4 control patients had reduced swollen joint counts from 30 mins post-test this was maintained at 24 hrs and 7 days, the same patients also had reduced tender joint counts. There was no change in the ESRs in either group. The CRP in 1 patient from the test group fell at 24 hrs and further decreased at 7 days. In the control group CRP decrease in 1 patient at 24 hrs only, neither of these 2 patients had reduced pain scores or DAS during the study.

Conclusion In the small number of patients studied, increased atmospheric pressure does not appear to have any effect on active rheumatoid arthritis. There also appears to be a large placebo response.

THU0140 RHEUMATOID ARTHRITIS (RA) IN VILNIUS AND OSLO: A COMPARISON REGARDING DISEASE AND HEALTH MEASURES

¹JH Dadoniene, ²T Uhlig, ¹S Stropuviene, ¹A Venalis, ³A Boonen, ²TK Kvien. ¹The Clinic of Internal Medicine and Rheumatology, Vilnius University, Vilnius, Lithuania; ²Department of Rheumatology, Diakonhjemmet Hospital, Oslo, Norway; ³Department of Rheumatology, University Hospital, Maastricht, Netherlands

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Background In Bone and Joint Decade comparative studies between countries could contribute to better understanding of disease burden of rheumatic diseases.

Objectives To compare disease and health status measures in RA patient cohorts from Vilnius, Lithuania and Oslo, Norway.

Methods For 201 patients from Vilnius RA register, matched cases according to age (mean 55.9 (SD1.0)) and gender (167

female) were identified in Oslo RA register. Study variables included sociodemographic characteristics, health status measures (MHAQ, SF-36, pain VAS), disease process measures (disease activity score (DAS-28)), ESR) and previous/current treatment.

Results Most disease activity and health status measures were worse in Vilnius patients (Table 1). Rheumatoid factor positivity was observed in 61 vs.49% ($p = 0.03$) in Vilnius and Oslo, respectively. Methotrexate was currently or previously used by 36 vs.49% ($p = 0.05$) and azathioprine by 29 vs.13% ($p = 0.000$) in Vilnius and Oslo. For other DMARDS, including corticosteroids no important differences were observed.

Abstract THU0140 Table 1

	Vilnius (n = 201)	Oslo (n = 201)
MHAQ (1–4)	2.30(0.78)	1.63(0.53)*
Pain (0–100 VAS)	59.4(20.0)	36.2(22.1)*
Patient global (1–5)	4.9(1.8)	4.2(2.0)*
Investigator global (0–100)	47.6(22.8)	29.2(24.7)*
DAS-28	5.26(1.0)	4.37(1.4)*
SF-36, physical functioning	35.2(25.2)	48.5(25.6)*
SF-36, mental health	54.6(21.0)	68.7(19.7)*
ESR mm/hr	28.6(13)	20.5(17.5)*

*-p-value <0.001, t-test for continuous values and chi-2 for counts.

Conclusion In this two-country comparison RA patients from Lithuania had generally worse health status and higher disease activity. This difference could represent geographic differences in disease severity or unequal access to rheumatology care.

THU0141 THE DIAGNOSTIC VALUE OF RHEUMATOID FACTORS AND ANTIBODIES TO CYCLIC CITRULLINATED PEPTIDE (CCP) IN EARLY ARTHRITIS

¹LM Jansen, ²IE Van der Horst-Bruinsma, ¹D Van Schaardenburg, ¹RJ Van de Stadt, ¹MH De Koning, ²BA Dijkman. ¹Department of Rheumatology, Jan Van Breemen Instituut, Amsterdam; ²Department of Rheumatology, VU Medical Center, Amsterdam, The Netherlands

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Background

Objectives To study the diagnostic value of IgM-RF, IgA-RF, anti-CCP and combinations of these antibodies measured at baseline to discriminate rheumatoid arthritis (RA) from undifferentiated polyarthritis (UPA) in patients with recent onset arthritis.

Methods Early arthritis patients with peripheral arthritis of 2 or more joints and less than 3 years of symptom duration were clinically diagnosed as RA or UPA by the rheumatologist during the first year. Excluded from the study were patients with bacterial, psoriatic, crystal-induced arthritis or spondylarthropathy. Optimal cut-off values for serum IgM-RF, IgA-RF and anti-CCP were deduced from Receiver Operating Characteristics (ROC) curves.

Results 379 patients (69% female, median age 57 (17–86)) were included. 258 patients were clinically diagnosed as RA and 121 as UPA. The Table 1 shows optimal cut-off values for IgM-RF (IU/ml), IgA-RF (arbitrary units: AU/ml) and anti-CCP (AU/ml) with the matching specificity and sensitivity percentages.

Both the IgM-RF > 40 and anti-CCP > 50 have a high specificity but the sensitivities are low. Because in many RA patients the occurrence of IgM-RF and anti-CCP antibodies are independent from each other, the best test criterion proved to be the