autoimmune disorder (s) or autoantibodies were present in 29% of the relatives. Two of 33 (6%) nonconsanguineous relatives had autoimmune disorders and 6/33 (18%) had autoantibodies.

Conclusion Autoimmune disorders in general are present in increased frequency in these Icelandic multicase SLE families.

THU0251 FAMILIAL CLUSTERING OF AUTOIMMUNE DISEASES IN SJÖGREN'S SYNDROME: AN ITALIAN CASE-CONTROL STUDY

¹R Priori, ¹F Conti, ¹E Cassarà, ²E Medda, ²MA Stazi, ³C Tomassini, ⁴E Bozzolo, ⁵F Franceschini, ⁶T Urbano, ⁷R Giacomelli, ¹G Valesini. ¹Rheumatology, "La Sapienza" University; ²Istituto Superiore Di Sanità, ISS, Rome; ³Rheumatic Diseases, University, Perugia; ⁴URIC, H-S. Raffaele, Milano; ⁵Clinical Immunology, University, Brescia; ⁶Internal Medicine, University, Ancona; ⁷Internal Medicine, University, L'Aquila, Italy

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Background Autoimmune diseases often cluster in families.

Objectives Aim of this study was to investigate the prevalence, the incidence and the risk for autoimmune diseases (AD) in first degree relatives (FDR) of Italian Sjögren's syndrome (SS) patients.

Methods A multicentre case-control study was performed in Italy. Cases (patients classified as SS according to 1994 EEC criteria) and controls (subjects without known history of autoimmune disorder) were randomly selected and interviewed by a trained medical doctor. Data on family history of AD in FDR were recorded. We calculated the incidence rate of AD in the two groups by dividing the number of cases of AD by person-years (py) at risk. The relative risk (RR) was estimated by dividing the incidence rate among relatives of cases by the incidence rate among relatives of controls. Furthermore we conducted stratified analyses according to sex of relatives and/or proband to evaluate whether the relation between SS in FDR and AD differs by sex. Statistical analyses were performed using STATA software.

Results 143 SS cases and 140 controls were enrolled. 34/143 (23.8%) and 8/140 (5.7%) had at least one FDR with AD ($p < 0.01$); 44/839 (5.24%) FDR of SS patients and 12/776 (1.55%) FDR of controls had AD ($p < 0.01$). We estimated an incidence rate of 1.03×1000 py in SS group and 0.32×1000 py in control group. The ratio of incidence density showed that relatives of SS cases have three time probability to have an AD compared to relatives of controls (RR 3.24, CI 95% 1.71–6.14). We found that the risk for AD is especially pronounced in relatives of female probands and it increases if the FDR is female, too.

Conclusion This case-control study confirms the clustering of AD in SS families and defines the risk to have an AD for first degree relatives of patients with SS.

THU0252 THE PREVALENCE OF SYMPTOMATIC KNEE AND DISTAL INTERPHALANGEAL JOINT OSTEOARTHRITIS IN ELDERLY URBAN POPULATION OF ANTALYA, TURKEY. A PRELIMINARY REPORT

¹C Kaçar, ¹B Bütün, ¹C Yıldırım, ¹E Gilgil, ¹G Sümbüloglu, ¹I Tekeoglu, ¹V Arıkan, ¹S Urhan, ¹Ü Dündar, ¹MC Öksüz, ²A Apaydin, ¹T Tuncer. ¹Department of Physical Medicine and Rehabilitation; ²Department of Radiology, Akdeniz University Faculty of Medicine, Antalya, Turkey

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Background

Objectives To estimate the prevalence of symptomatic knee and distal interphalangeal joint (DIP) osteoarthritis (OA) in the urban population of Antalya.

Methods This cross-sectional study, as part of a continuing larger study, aimed to evaluate the prevalence of symptomatic knee and DIP OA in the elderly urban population of Antalya (508,840 population according to 1997 national census). By random cluster sampling based on the registries of local offices of the Ministry of Health, 267 individuals aged 50 or over (146 men, 121 women) were interviewed face to face by 10 physicians and 20 medical students trained for the study. The individuals were subjected to a questionnaire regarding knee pain, worsening pain on exertion and gelling phenomenon. They were also asked about their occupational status and performing namaz (an Islamic ritual based on bodily movements). If they reported any swelling in their hand joints, a physician simultaneously inspected the DIP joints for nodular swelling. In the case of suspicion for knee OA, individuals were invited to the hospital for further evaluation by physical examination and direct roentgenogram.

Results Knee pain was reported in 38(28,4%) of men and 74 (63,8%) of women. Of women, 64(57,1%) had worsened knee pain on exertion and 59(51,3%) defined gelling, and in men these figures were 26(20,5%) and 28(21,5%), respectively. The prevalence of knee osteoarthritis was determined as 26,4% in women and 6,2% in men (15,4% of total). The DIP OA was observed in 5(3,8%) of men and 30(26,3%) of women.

Conclusion OA is a major health problem in the elderly population, especially in more than one fourth of the women aged 50 or over.

This study is supported by the Akdeniz University Research Fund.

THU0253 THE PREVALENCE OF INFLAMMATORY RHEUMATIC DISEASES IN THE URBAN POPULATION OF ANTALYA, TURKEY (A PRELIMINARY STUDY REPORT)

¹B Bütün, ¹T Tuncer, ¹C Kaçar, ¹E Gilgil, ¹I Tekeoglu, ¹Ç Yıldırım, ¹G Sümbüloglu, ¹S Urhan, ¹V Arıkan, ¹Ü Dündar, ¹MC Öksüz, ²G Yücel. ¹Department of Physical Medicine and Rehabilitation and Rheumatology Service; ²Department of Biochemistry, Akdeniz University Faculty of Medicine, Antalya, Turkey

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Background

Objectives To estimate the prevalence of rheumatoid arthritis, sero-negative spondylarthritis, SLE and other connective tissue diseases in the urban population of Antalya.

Methods The region in which the study was performed is the urban area of Antalya with a population of 508,840 (according to 1997 national census) and a high migratory rate. 3000 subjects, 16 years old and more were selected by random cluster sampling. Trained 10 clinicians and 20 medical students visited 1521 subject in their homes (door to door system) so far and detailed interview on the basis of a standardised questionnaire was performed. The patients suspected of inflammatory rheumatic diseases were invited to the hospital and detailed physical examination and laboratory evaluation was done, if necessary. The diagnosis was established by using standard criteria of each diseases.

Results Of subjects, 767 female and 754 male (totally 1521) were evaluated so far. Seven Rheumatoid Arthritis (6 Female, 1 Male), 2 Ankylosing spondylitis (2M), 2 SLE (1M, 1F), 1 Systemic sclerosis (F), 1 Behçet disease (F), 1 Sarcoidosis (F), 1 FMF(M) were established and thus the point prevalences of

them were estimated as 0.46%, 0.13%, 0.13% respectively for the first 3 and 0.06% for the last 4 diseases.

Conclusion This is the first comprehensive prevalence study on rheumatic diseases in such a sample which may reflect Turkish population because of migration in this area from nearly all over Turkey. The study will be maintained up to 3000 subject and presented at Euler 2001 Congress as a completed study.

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THU0254 RISK FACTORS FOR BACK PAIN IN A CROSS SECTIONAL AND IN A ONE-YEAR FOLLOW UP STUDY IN NURSES

M Brzosko, I Fiedorowicz-Fabrycy, J Fliciński, H Przepiera-Bédzak, K Prajs. *Rheumatology, Pomeranian Academy of Medicine, Szczecin, Poland*

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Background

Objectives To find risk factors for back pain in retrospective study, one year follow-up study, recurrence and first episode of back pain in one year follow-up study in nurses.

Methods The study was performed on 470 nurses of clinical hospital, 92,3% of nurses answered a questionnaire concerning information about low back pain. 358 (82,5%) have answered the questionnaire on the physical activities performed at work and 369 (85,0%) were examined. 87,9% of nurses who answered the first questionnaire have taken part in follow up study. The potential relationship of the investigated 47 variables like financial status, habits, physical activity or work conditions were assessed in multivariate logistic regression model and then the role of significant variables was counted as relative risk with 95% of confidence interval in univariate logistic regression model. For statistical evaluation of the data STATA 5.0 software was used.

Results The multivariate logistic regression analysis did not show any common risk factor for back pain in cross sectional, one-year follow up study, for the first episode or for the reoccurrence of back pain in one-year follow up study. Cycling was a risk factor for back pain in both one year follow-up study and first episode (OR 1,3) and for recurrence of back pain (OR 1,9) and the same applied to work with arms elevated on the shoulder level longer than 1 min an hour. These two variables were the only significant risk factors ($p < 0,05$) for the first episode of back pain in one-year follow up study. Spinal mobility ranges in different planes did not have any impact on first episode of back pain. Age, bringing up children, alcohol drinking, experiencing recurrent diarrheas, abdominal pain, discontentment with own job, limited lateral trunk flexion to the right, pushing heavy objects and both hands lifting weights were risk factors only for reoccurrence of back pain in a one-year follow up study. Bad assessment of the own health was a risk factor of back pain in cross sectional, one-year follow up study and especially for the reoccurrence of back pain in one-year follow up study.

Conclusion There are different risk factors of back pain in retrospective study, one year follow-up study, recurrence and first episode of back pain in one year follow-up study in nurses.

THU0255 A NEW BONE PROGNOSTIC FACTOR IN MULTIPLE MYELOMA (MM): LEVEL SERUM CROSS-LAPS (CTX) AT DIAGNOSIS

¹A Duché, ²X Leleu, ²A Duhamel, ²V Delannoy, ²T Facon, ¹M Brazier. ¹Clinical Pharmacy Laboratory, Amiens, France; ²Hematology Department, CHU Lille, Lille, France

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Background In MM b2 microglobuline (b2) and chromosome 13 deletion (Ch 13) have demonstrated an adverse prognostic impact on response, duration and survival. Bone turn-over markers are studied in management and follow-up of MM.

Objectives The aim of this study was to demonstrate that a new bone resorption marker, ie. initial serum CTX level at diagnosis, is a potential prognostic factor in MM.

Methods Between March 1990 and June 2000, 122 MM patients were hospitalised in our department. They all have an evaluation of demographic, usual biologic parameters, and an extensive evaluation of prognostic parameters at diagnosis, including b2, Ch 13 and CTX. Serum level CTX were assessed by ELISA test. Event free survival, relapse and death were achieved during follow-up. Descriptive analysis was performed, and correlations were obtained by univariate analysis.

Results descriptive analysis showed: mean age 61 years; men 57%; b2 > 3 mg/l, 45%; Ch 13, 32,5%; C Reactive Proteine > 6 mg/l, 35%; stage according to Durie -Salmon (I, II, III) respectively 17.6, 25, 57.4%; IgG, IgA, other Ig respectively 62, 25, 13%; number of bone lesions > 6, 21%, relapse 59%, death 42%. ROC curved didn't permitted to determined ideal threshold for CTX. Median CTX level (CTX = 2470 pmol/l) at diagnosis was correlated to survival and relapse and CTX level at diagnosis (dCTX) was correlated to all prognostic parameters studied in an univariate statistical analysis. DCTX > 2470 pmol/l is correlated to poor survival ($p = 0.0151$) with event free survival at 30 months descriptive analysis showed: mean age 61 years; men 57%; b2 > 3 mg/l, 45%; Ch 13, 32,5%; C Reactive Proteine > 6 mg/l, 35%; stage according to Durie -Salmon (I, II, III) respectively 17.6, 25, 57.4%; IgG, IgA, other Ig respectively 62, 25, 13%; number of bone lesions > 6, 21%, relapse 59%, death 42%.

ROC curved didn't permitted to determined ideal threshold for CTX. Median CTX level (CTX = 2470 pmol/l) at diagnosis was correlated to survival and relapse and CTX level at diagnosis (dCTX) was correlated to all prognostic parameters studied in an univariate statistical analysis. DCTX > 2470 pmol/l is correlated to poor survival ($p = 0.0151$) with event free survival at 30 months (versus 60 months). DCTX is statistically significantly associated to sexe ($p = 0.0383$), b2 > 3 mg/l ($p = 0.0007$), Ch 13 ($p = 0.0504$), C Reactive Proteine > 6 mg/l ($p = 0.0348$), stage according to Durie -Salmon ($p = 0.0015$), number of bone lesions ($p = 0.0330$), poor survival ($p = 0.089$), and relapse ($p = 0.0018$).

Conclusion We demonstrate in this retrospective study that dCTX level appears as a new prognostic factor on survival and relapse. It is associated to other prognostic factors, stage according to Durie -Salmon, and high number of bone lesions. Multivariate analysis must be performed to confirm the powerful of the combination of b2, Ch 13 and dCTX, as prognostic tool to screen patients and manage therapeutic decisions.