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Colegio Mexicano de Reumatología

Órgano Informativo y de Vinculación del Colegio Mexicano de Reumatología

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DIRECTORIO

CONTENIDO

Boletín Mexicano de Reumatología

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Mensaje del Presidente

Ha llegado el final de un ciclo, en el que se ha trabajado con una meta única y específica: servir al Colegio Mexicano de Reumatología y a todos sus agremiados.

Se han cumplido objetivos muy relevantes, como el tener una nueva sede, la cual está a la altura de todos ustedes, un lugar que los recibirá con cariño.

En el ámbito científico, se ha implementado una base de datos biológicos a nivel nacional, lo que ha desencadenado una serie de proyectos con terapias biológicas que poco a poco iremos dando a conocer y que redundará en una mejor relación con Latinoamérica. Asimismo, el haber terminado un consenso de anti-inflamatorios (AINEs) junto con la Sociedad Española de Reumatología ha sido un gran avance, con el cual, además, se han afianzado diversos proyectos.

No debemos olvidar la fuerza que están tomando las Asociaciones de pacientes a nivel nacional. Este año se les ha agrupado y organizado mejor, siempre bajo la orientación del Colegio, y no se diga el empeño que hemos tenido en que la Reumatología en México alcance un lugar preponderante a nivel de la sociedad mexicana, espacio que le corresponde y gracias al cual se nos considere dentro de las instancias gubernamentales, para que día a día aumente el apoyo que se les pueda brindar a los pacientes y así lograr que la difusión de la Reumatología sea cada vez mayor; que podamos palpar un crecimiento de todos nosotros como personas ante todo y como profesionistas de la medicina.

Debemos resaltar también el Congreso Mexicano de Reumatología, en Veracruz, el cual se ha organizado paso a paso y con mucha dedicación por el equipo que componemos el Comité Directivo, agradeciendo a todos ustedes su apoyo incondicional y participación y por hacer de este año, un año lleno de amistades y de buenos momentos que nunca se van a olvidar.

Quedan aún muchas cosas en el tintero, pero pienso que el trabajo se ha hecho patente.

Gracias por su confianza y paciencia.

Dr. Manuel Robles San Román.
Presidente

Acta de la Sesión correspondiente a Noviembre 2007 Colegio Mexicano de Reumatología

Siendo las 20:30 horas del día 27 de noviembre de 2007 se reunieron en el auditorio «Dr. Aquiles Calles» del Centro Médico Nacional 20 de Noviembre del ISSSTE, sito en Avenida Félix Cuevas 540, 1er. Piso Colonia del Valle, Delegación Coyoacán en la Ciudad de México, los asociados que en la lista de asistencia se detallan, a efecto de llevar a cabo la Reunión Mensual del Colegio Mexicano de Reumatología al tenor del siguiente Orden del Día:

1. Lectura y aprobación del Acta de la Sesión anterior
2. Informe de la Mesa Directiva
3. Asuntos generales
4. Programa académico

Estando presentes 62 asociados en sala y 28 por videoconferencia se procedió al desahogo del Orden del Día, dándose:

1. Lectura y aprobación del Acta de la Sesión anterior

Se procedió a dar lectura del Acta de la Sesión Mensual del Colegio Mexicano de Reumatología, a fin de ser aprobada,

manifestando por unanimidad de los presentes su aceptación, tomándose el:

Acuerdo: Los asociados del Colegio Mexicano de Reumatología aprueban el Acta de la Sesión de fecha 30 de octubre de 2007 celebrada en la Ciudad de México en el auditorio «Dr. Aquiles Calles» del Centro Médico Nacional 20 de Noviembre del ISSSTE.

2. Informe de la Mesa Directiva

El Dr. Manuel Robles San Román abordó los siguientes puntos.

a) Comentó que los reumatólogos mexicanos habían participado en 17 trabajos enviados al Congreso Americano de Reumatología.
b) Informó que se había llevado a cabo la reunión de profesores y residentes con la participación de destacados profesores y la realización de un taller de introducción de ultrasonido musculoesquelético.
c) Manifestó que durante el congreso Americano de Reumatología se habían realizado 2 reuniones con el Comité ejecutivo de la Sociedad Española de Reumatología, se había tomado el acuerdo para el intercambio de residentes y se continuaría con los trabajos binacionales. Además, a partir del próximo año vendrán a competir residentes de Canadá y España en la Sesión de Casos Clínicos.
d) El Dr. Antonio Rafael Cabral Castañeda comentó que durante su gestión establecerá una unidad de investigación con sede en las oficinas del Colegio, para ello había contactado a un Comité de Asesores formado por el Dr. Rubén Burgos Vargas, Antonio Villa, Juan Calva y Mario Humberto Cardiel Ríos. El objetivo de la unidad será la creación y conducción de proyectos del Colegio Mexicano de Reumatología, en forma independiente, sin financiamiento de la industria farmacéutica. Mencionó que invitaría a participar al colegiado para ofrecer asesoría sobre investigación. En Veracruz presentará el proyecto concluido acerca del funcionamiento de la unidad de investigación. En lo que respecta a la relación México-Canadá informó que se tendrían varias reuniones el próximo año, durante los Congresos de Veracruz y Canadá y en León en 2009. Probablemente en septiembre se realizará el intercambio de residentes. Sigue vigente la propuesta de realizar el congreso binacional en 2011 con sede probable en Cancún. Finalmente, comentó que se realizó el primer contacto para la formación de grupos de estudio con los canadienses. Por otra parte, el Dr. Jorge Sánchez Guerrero acudiría al Congreso de la Sociedad Canadiense como profesor invitado y el Dr. Ross Petty vendría a México.

3. Asuntos generales

El Dr. Luis Javier Jara Quezada comentó que es importante destacar que, además de los trabajos presentados, hubo participación de reumatólogos mexicanos durante el Congreso Americano de Reumatología, como la Dra. María del Carmen Alejandra Amigo Castañeda, el Dr. Juan Canoso Ardigó y el propio Luis Javier Jara Quezada, quien coordinó una reunión latinoamericana.

4. Programa Académico

El Dr. Manuel Robles San Román presentó al Dr. Lucio Ventura Ríos, secretario del Colegio Mexicano de Reumatología, quien coordinó la sesión de casos clínicos en la que participaron los médicos residentes Jannet Riega Torres del Hospital universitario, Dr. José Eleuterio González de Monterrey Nuevo León, María Guadalupe Rodríguez Maldonado, del Servicio de Reumatología Pediátrica del Centro Médico Nacional La Raza; Pablo Villaseñor Ovies, del Instituto Nacional de Ciencias Médicas y Nutrición Salvador Zubirán; Rafael García López, del Hospital General de Occidente, Guadalajara Jalisco; Lizandra Hernández Roque, del Hospital General de México, y Verónica González Díaz, del Antiguo Hospital Civil de Guadalajara. Las presentaciones fueron evaluadas por los asistentes para seleccionar a los 2 residentes que realizaron mejor presentación, quienes se hicieron acreedores a una beca EULAR; las ganadoras fueron las doctoras Lizandra Hernández Roque y Jannet Riega Torres.

La sesión finalizó a las 22:30 horas.

Dr. Manuel Robles San Román
Presidente

Resúmenes de los trabajos presentados por miembros del Colegio Mexicano de Reumatología en el pasado Congreso Americano de Reumatología (ACR) en la Cd. de Boston, Ma. los días 6 al 11 de noviembre 2007

Presentation number: 450

The association between reference laboratory values and the classification of SLE

Michelle Petri[1], Daniel J. Wallace[2], Michael Weisman[2], Dafna Gladman[3], Paul Fortin[3], Murray Urowitz[3], Victoria Werth[4], Melissa Costner[5], Caroline Gordon[6], Graciela S. Alarcón[7], Rosalind Ramsey-Goldman[8], Peter Maddison[9], Ann Clarke[10], Susan Manzi[11], Sang-Cheol Bae[12], Joan T. Merrill[13], Ellen Ginzler[14], John Hanly[15], Ola Nived[16], Gunnar Sturfelt[16], Jorge Sánchez-Guerrero[17], Ian Bruce[18], Cindy Aranow[19], David Isenberg[20], Asad Zoma[21]

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Purpose: The current ACR classification criteria for SLE include multiple serologic tests. We investigated the association of these tests, as well as other SLE serologic tests, with SLE versus a wide array of non-SLE patients. **Methods:** The Systemic Lupus International Collaborating Clinics (SLICC), as part of an effort to revise the ACR criteria, obtained sera and plasma from SLE patients and non-SLE controls (undifferentiated connective tissue disease, antiphospholipid syndrome, rheumatoid arthritis, scleroderma, vasculitis, chronic cutaneous lupus, and others). A classification of SLE versus non-SLE was based upon the rating given by a majority of SLICC raters who reviewed a synopsis of each case. The Rheumatology Diagnostics Laboratory performed all tests (Los Angeles, CA). **Results:**

Laboratory result	SLE diagnosis based on majority of raters		Odds ratio	P-value
	Yes (n = 312)	No (n = 399)		
Anti-C1Q	87 (28%)	48 (12%)	2.8	< 0.0001
ANA titer	297 (96%)	353 (89%)	2.7 0.0016	
Anti-Sm	57 (19%)	6 (2%)	15.1	< 0.0001
Anti-RNP	109 (36%)	27 (7%)	7.7	< 0.0001
RPR reactive	6 (2%)	6 (2%)	1.3	0.6800
Low C3	33 (11%)	5 (1%)	9.2	< 0.0001
Low C4	64 (21%)	15 (4%)	6.5	< 0.0001
Anti-dsDNA (Farr)	135 (45%)	35 (9%)	8.2	< 0.0001
Anti-dsDNA (Crithidia)	56 (19%)	3 (1%)	29.4	< 0.0001
Anti-dsDNA (ELISA)	46 (16%)	3 (1%)	9.9	< 0.0001
Anti-Ro	100 (33%)	57 (14%)	3.0	< 0.0001
Anti-La	35 (12%)	21 (5%)	2.3	0.0024
Anti-aCL-IgG	46 (15%)	23 (6%)	2.8	< 0.0001
Anti-aCL-IgM	33 (11%)	33 (8%)	1.3	0.2900
Anti-aCL IgA	7 (2%)	3 (1%)	3.0	0.09
Anti-β2 GPI IgG	13 (4%)	20 (5%)	0.8	0.58
Anti-β2 GPI IgM	19 (6%)	17 (4%)	1.4	0.28
Anti-β2 GPI IgA	73 (23%)	36 (9%)	3.1	< 0.0001
Rheumatoid factor	77 (25%)	161(41%)	0.5	< 0.0001

The best multiple variable model assigned the following weights to the laboratory tests: anti-dsDNA, Farr (3);

anti-RNP (3); anti-dsDNA, Crithidia (2); anti-Ro (2); anti-β2 glycoprotein I IgA (1); low complement (low C3 or low C4 or both) (1); and rheumatoid factor (-2). **Conclusion:** Based on this study, there is no justification for the false positive test for syphilis nor for anti-aCL IgM remaining in the ACR classification criteria. Of the three anti-dsDNA assays, Crithidia was more specific than Farr. This study does not address, however, the choice of anti-dsDNA assay in clinical practice. Because this study was cross-sectional, it cannot address the affect of repeat measures of autoantibodies over time in the diagnosis or classification of SLE.

Presentation number: 680
Abatacept treatment of juvenile idiopathic arthritis (JIA): safety report

D.J. Lovell[1], N. Ruperto[2], A.M. Prieur[2], E. Paz[2], N. Rubio-Perez[2], C.A. Silva[2], C. Abud[2], R. Burgos-Vargas[2], V. Gerloni[2], J.A. Melo-Gomes[2], C. Saad Magalhaes[2], F. Sztajnbok[2], C. Goldenstein-Schainberg[2], M. Scheinberg[2], P. Hashkes[1], C. Hom[1], L.H. Sigal[3], A.J. Block[3], A. Covucci[3], P.L. N Cornet[3], L. Pagliaro[3], E.H. Giannini[1], A. Martini[2]

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Purpose: Report of safety experience in a double-blind (DB), randomized withdrawal study, with an openlabel (OL) extension in patients with JIA/JRA treated with abatacept (ABA). **Methods:** Patients who met the ACR Pediatric (Pedi) 30 definition of improvement following a 4-month OL lead-in period were randomized 1:1 to DB therapy with ABA or placebo (PBO) every 28 days for up to 6 months. Safety is presented for the OL lead-in and DB periods. **Results:** 190 patients were enrolled and 170 completed the OL lead-in period; 123 patients achieved an ACR Pedi 30 response and 122 elected to enter the DB withdrawal period. During the OL lead-in, 6 patients reported serious AEs (SAEs): 3 related to underlying disease (flare [2 cases]; joint replacement [1 case]) and 1 case each of varicella, ovarian cyst and acute lymphocytic leukemia. The leukemia was diagnosed at Day 89 in a patient who was anemic at enrollment - with progressive decreasing hemoglobin from Day 1 (relationship to study medication was unlikely). The 70% of patients reported AEs; the most common were headache (13.2%), nausea (10.0%), cough (8.9%), diarrhea (8.9%), upper respiratory tract infection (URTI; 7.4%) and pyrexia (6.3%). Other than URTI, there were few infectious AEs (all had a typical course and resolved with treatment) and no opportunistic infections. Eight (4.2%) patients experienced acute infusional AEs: all but 1 were mild in intensity; none were serious; most were single events in 1 patient each; headache and dizziness occurred in 4 and 2 patients, respectively, with no recurrences. In the DB period, no SAEs were reported in the ABA group; 3 SAEs were reported for 2 PBO-treated patients (hematoma in 1; varicella and encephalitis in the other); all resolved and none resulted in discontinuation. AEs were reported by 61.7% *vs* 54.8% in the ABA *vs* PBO groups; the most common events were influenza (5 [8.3%] *vs* 4 [6.5%]), bacteriuria (4 [6.7%] *vs* 0 [0%]), nasopharyngitis (4 [6.7%] *vs* 3 [4.8%]), URTI (4 [6.7%] *vs* 5 [8.1%]) and pyrexia (4 [6.7%] *vs* 5 [8.1%]). Other AEs occurred with similar frequencies in both groups. Acute infusional AEs were reported in 1.7% *vs* 3.2% of ABA *vs* PBO groups; all were mild/moderate (none serious) in intensity. No serious infections, autoimmune disorders or anaphylaxis episodes were reported in any period. No consistent patterns of abnormal liver/kidney function tests or hematological parameters emerged. **Conclusion:** Abatacept appeared to be well tolerated in patients with JIA through the OL lead-in and DB periods of this study.

Presentation number: 749
Efficacy, safety, and tolerability of infliximab in juvenile-onset spondyloarthropathies (JO-SPA): results of the three-month, randomized, double-blind, placebo-controlled trial phase

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JO-SpA, including enthesitis related arthritis, is characterized by peripheral arthritis and enthesitis, impaired functioning, and in some cases structural changes on the long-term. Infliximab -a TNF-α blocking monoclonal antibody- is effective and safe in the treatment of SpA. Case series in children with JO-SpA showed the same results. **Objectives:** To demonstrate superior clinical efficacy with infliximab administered at a dose 5 mg/kg compared with placebo, in controlling the signs and symptoms of active juvenile onset SpA over a period of 12 weeks. **Material and methods:** Patients with JO-SpA patients (ESSG classifica-

tion criteria; onset ≤ 16 years; screening ≤ 18 years) with active arthritis ≥ 2 joints; enthesitis ≥ 3 peripheral sites; VAS pain ≥ 40 mm; and no response to NSAID and sulfasalazine or methotrexate. Main exclusion criteria: Pregnancy; lack of contraceptive methods; functional class IV; psoriasis, inflammatory bowel disease; infectious diseases, mainly TB; prednisone ≥ 10 mg/day. This is a two-phase investigator initiative study, 1st phase: 12-week, randomized, double-blind, placebo-controlled; 2nd phase 52 week extension. Diagnostic stratification: undifferentiated SpA (u-SpA) or ankylosing spondylitis (AS). Primary efficacy measure: number of active joints. Secondary and exploratory efficacy measures were also included. Patients received either infliximab 5 mg/kg or placebo at weeks 0, 2, and 6. **Results:** We included 26 patients (25 males, median age at onset 15.2 years [9-18]; 21 with u-SpA and 5 with AS). Twelve patients received infliximab and 14 placebo. All patients completed the double-blind phase of the trial. We found no significant differences between the groups at baseline regarding demographic and clinical features, particularly those included in the primary, secondary and exploratory analysis. In the infliximab group, the number of active joints decreased from a median of 5 (2-10) to 0.8 (0-7) ($p < 0.001$) at week 12; change in the placebo group was not significant, from 6 (3-16) to 4.2 (0-11) ($p = 0.242$). The difference between infliximab and placebo groups was significant ($p = 0.007$). Most secondary and exploratory efficacy measures favored infliximab over placebo at significant levels (data not shown). Likewise, there were no significant differences in the frequency of adverse events; no serious adverse events were recorded. **Conclusion:** Infliximab significantly the inflammatory signs and symptoms of JO-SpA. Infliximab efficacy is significantly superior to the effect of placebo, but the frequency of adverse events is similar.

Presentation number: 898
Long term outcome of anti-TNF therapy in juvenile spondyloarthropathy

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Background: Children with juvenile spondyloarthropathy (JSpA) refractory to standard anti-rheumatic therapy have morbidity and reduced quality of life. TNF-α is important in the pathogenesis of synovitis and enthesitis, and anti-TNF therapy has been shown to be effective in refractory JspA in short-term followup studies. **Objective:** To examine the impact of long-term anti-TNF treatment in JSpA patients refractory to NSAIDs, DMARDs and corticosteroids. **Methods:** JSpA pts treated with anti-TNF agents for ≥ 2 yrs were included in the study. Our outcomes were within-subject differences in tender entheseal counts (TEC) and active joint counts (AJC), serum inflammatory markers, functional assessments (CHAQ score), DMARD requirements, and safety. **Results:** 12 JSpA pts (10M, 2F), who also fulfilled ILAR criteria for enthesitis-related-arthritis (ERA), were studied. All were HLA-B27 positive, and had a mean age at diagnosis of 12.5 ± 3.2 yrs, a mean disease duration pre-TNF therapy of 3.7 ± 2.2 yrs, a mean followup post-TNF therapy of 4.5 ± 1.0 yrs. The pts were followed at 6 wks, 6 months and yearly after initiation of either infliximab (n = 8) or etanercept (n = 4). At baseline, all pts exhibited active arthritis and enthesitis resistant to therapy with NSAIDs (12), methotrexate (9), sulfasalazine (7), oral corticosteroids (8), intravenous steroids (3), intra-articular steroids (9), and bisphosphonates (2). In 2 pts, sulfasalazine (1) and bisphosphonates (1) were stopped at the start of anti-TNF therapy. The arthritis and enthesitis improved as early as 6wks and most achieved complete resolution of the TEC and AJC by 6 months. Inflammatory markers and CHAQ scores improved in all pts. Anti-rheumatic agents that were decreased/discontinued post anti-TNF treatment included: NSAIDs (12/12), methotrexate (8/9), sulfasalazine(6/6), corticosteroids (5/5) and bisphosphonates (1/1). 12 pts exhibited clinical remission at their last followup: 3 yr (N = 3), 4 yr (N = 6), 5 yr (N = 2), 6 yr (N = 1). 2 pts discontinued anti-TNF therapy after 2 yrs of treatment and continue to remain in clinical remission. Four pts flared: 2 with tapering their methotrexate and 1 after stopping infliximab. All responded with restarting/optimization of their anti-TNF dose based on body weight and have been in clinical remission at their last followup. Three pts switched from infliximab to etanercept therapy during their disease course. There were no serious adverse events reported. One pt had a flu-like reaction following the 3rd infliximab infusion. One pt receiving infliximab had recurrent uveitis requiring treatment with methotrexate and corticosteroids. **Conclusion:** Anti-TNF therapy is an effective and safe treatment for refractory JSpA pts resulting in good longterm disease control. Further prospective studies are warranted to examine the long-term efficacy of anti-TNF therapy in larger numbers of JSpA pts.

Presentation number: 1107
Estimating age at menopause in patients with systemic lupus erythematosus (SLE): comparison between two methods

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Estimation of age at menopause is controversial. Variations depend largely on the procedure utilized for measurement. In the general population both the recalling and the status quo techniques have been applied. Recalled mean age at menopause has consistently been reported as younger than median age obtained by the status quo technique, computed by either probit or Kaplan Meier survival analyses. In SLE patients, age at menopause has been assessed only by the recalling method, estimated between 41 and 47.8 years. Considering the experience in the general population, it is important to reassess the age at menopause in SLE patients with different techniques. AIM. To determine the age at menopause in SLE patients by 2 methods: recalling and status quo techniques. **Methods:** SLE patients (≥ 4 ACR criteria), 16-60 years old, were face to face interviewed using a standardized questionnaire. Included variables were grouped as follows: general information (date of birth, years of schooling), smoking habit, gynecobstetric history (hysterectomy, pregnancy, hormonal contraceptives use, date of last menstrual period). Postmenopausal status was defined as amenorrhea ≥ 12 months in the absence of pregnancy and hysterectomy. Age at menopause by recalling corresponded to that self-reported by the patient at the last menstrual period. Women with history of hysterectomy were excluded from the analysis. **Statistical analysis:** The age at menopause obtained by the recalling method was calculated as mean [SD]. The median age at menopause by status quo method was computed by both probit analysis and Kaplan-Meier survival test. With the probit analysis median age was the point at which half of women in the study population were postmenopausal considering menopause status as dependent and age as independent variables. Kaplan-Meier estimates the cumulative probability of not having undergone menopause up to a given age considering menopause status as censed variable and age as time variable. P value was set < 0.05, two tailed. **Results:** A total of 807 consecutive SLE women attending the outpatient clinic were interviewed. Mean education was 12.4 [4.0] years. The mean age of the population studied was 35.5 [10.6] years, and its distribution was not different from the Mexican general population, p = 0.79. The patients analyzed were 764, median age in 139 (18.2%) postmenopausal patients at time of interview was 49 years of whom 27 (19.4%) patients were younger than 40 years. Mean age at menopause by recalling method was 40.5 [8.9]. Median age at menopause by probit analysis was 48 [SE 0.086] years. Median age at menopause computed by Kaplan-Meier survival analysis was 52 years. **Conclusions:** Younger age at menopause in SLE patients reported in previous studies could result of the methodology used and not on disease status. The wide difference between recalling and status quo techniques may be due to memory impairment in SLE patients.

Presentation number: 1114
Predictors for remission and frequency of flares in patients with systemic lupus erythematosus (SLE) of recent onset

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Remission in SLE patients has been described as a rare manifestation. Among SLE patients with recent onset of disease, the incidence, duration of remission and frequency of flare after first year of remission have not been assessed. AIM. To determine the predictors for remission in SLE patients of recent onset and frequency of flares after first year of remission. **De-**

sign: Retrospective cohort study. **Methods:** 346 patients with SLE of recent onset (< 1 yr of follow-up, >4 ACR criteria) were studied. Information was obtained from the medical records, using a standardized format to gather information about socio-demographic data, comorbidities, healthrelated behaviors, treatment, body mass index, and SLE characteristics. SLE activity (SLEDAI-2K) and chronic damage (SLICC/ACR DI) were assessed from the medical notes at the baseline and each visit to rheumatologist. Patients were followed from the diagnosis of SLE or first appointment to the institute after the diagnosis until complete remission criteria, end of the follow-up period (December-2004), lost at follow-up or death, whichever came first. Patients who did not attend at least one scheduled visit within a year were censored. Remission was defined as at least one year without clinical and serological manifestation of disease (SLEDAI-2K = 0) and absence of specific treatment to SLE during the same period. Those patients who did receive antimalarial drugs as maintaining treatment also were included. Pregnancy and end stage renal failure patients were excluded. **Statistical analysis:** The primary outcome was the development of remission. Descriptive statistics were used. Categorical variables were compared using chi-squared or Fisher's exact test, and continue variables using Student's t-test or U-Mann-Whitney test. The predictor factors for remission were calculated by the Cox regression model. **Results:** At 1,595.2 py of follow-up, 31(8.9%) patients completed remission criteria. Twenty (5.8%) patients without treatment and 10 (2.9%) with antimalarial drugs. The incidence rate of remission was 19.4 per 1,000 py. Mean of follow-up at remission was 6.1 + 3.4 yr. Among 31 patients with remission criteria, 20 (64%) patients had flare of disease within of 2.8 + 3.5 (median 1.05 yrs). The patients who completed remission criteria has higher age at diagnosis (36.9 + 16.3 *vs* 28.0 + 9.9 yrs, p = 0.01), higher frequency of discoid lesions (19% *vs* 9%, p = 0.09) and less frequency of renal manifestations (42% *vs* 62%, p = 0.04) than patients without remission. Patient without remission had higher disease activity (AUCSLEDAI- 2K) along the follow-up. At baseline, predictors for remission were not founded. **Conclusions:** At first year of remission in SLE patients of recent onset, the frequency of flare was 64% including in patients with antimalarial drugs as maintaining therapy. There were not founded predictors for remission at baseline.

Presentation number: 1115
Disease outcomes in the first 4 years of SLE: results from the SLICC inception cohort

Murray B. Urowitz, Dafna D. Gladman, Dominique Ibáñez, Paul R. Fortin, Jorge Sánchez-Guerrero, Sang-Cheol Bae, Caroline P. Gordon, Ann E. Clarke, John G. Hanly, Daniel J. Wallace, David A. Isenberg, Joan T. Merrill, Ellen M. Ginzler, Graciela S. Alarcón, Kristjan Steinsson, Michelle A. Petri, Munther A. Khamashta, Ian Bruce, Mary Anne Dooley, Susan Manzi Rosalind Ramsey-Goldman, Gunnar K. Sturfelt, Ola Nived, Asad A. Zoma, Peter J. Maddison, Josep Font, Ronald van Vollenhoven, Cynthia B. Aranow, Kenneth C. Kalunian, Thomas Stoll, David Wofsy, Jill P. Buyon

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Patients with systemic lupus erythematosus (SLE) develop premature atherosclerosis likely associated with a combination of factors, including disease and its therapy related factors, classic coronary artery disease risk factors, genetic factors or a combination of these. We have previously shown that a significant number of these factors are present within the first year of disease. This study examines the accumulation of lupus related risk factors over 4 years in a multicenter, international inception cohort of SLE patients. **Methods:** An inception cohort of SLE patients from 27 centres from 11 countries has been assembled according to a standardized protocol between 2000 and 2007 to study risk factors for atherosclerosis. SLE factors included were: disease activity measured by the SLE disease activity index (SLEDAI-2K), accumulated damage measured by the SLICC/ACR damage index

Table I.

Variable	Enrollment	At 4 years
SLEDAI-2K	5.84 ± 5.75	3.73 ± 4.67
SDI	0.62 ± 1.07	1.13 ± 1.47
Cardiac component	0 ± 0	0.06 ± 0.26
SF-36 PCS	34.6 ± 12.2	40.9 ± 12.4
MCS	42.8 ± 13.4	44.4 ± 14.2
Corticosteroid therapy	169 (72.5%)	111 (49.6%)
Antimalarials	141 (61.0%)	144 (64.3%)
Immunosuppressive drugs	87 (37.5%)	106 (47.3%)

(SDI), quality of life and function measured by the SF-36 physical component score (PCS) and mental component score (MCS), as well as corticosteroid therapy, antimalarial and immunosuppressive use. Analysis was done using descriptive statistics. **Results:** Of the inception cohort of 1,091 SLE patients, 235 have now been followed for 4 years and constitute the population for this study. 85.1% are females, 48.9% Caucasian, 15.7% Black, 16.7% Asian, 16.7% Hispanics and others 2.1%. Adjusted mean SLEDAI-2K (AMS) was 4.08 ± 3.48 at 4 years *(Table I)*.

While disease activity decreased over the 4 years of follow-up, and the quality of life, (measured by the SF-36) improved, there was accumulation of damage over this period of follow-up. The damage items with the higher rate of accumulation over the first 4 years of disease were neurological, renal and musculoskeletal, which in large part were damage related to active lupus. The cardiac component was very small. **Conclusion:** In addition to an increased accumulation of classic coronary artery disease risk factors over the first few years of disease previously shown, patients with SLE accumulate organ damage secondary to active disease and therapy. Thus lupus disease activity and therapy in early disease may be risk factors for coronary artery disease.

Presentation number: 1116
Accumulation of atherosclerotic risk factors over 3 years by ethnicity in an international inception cohort

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We have previously shown that a significant number of atherosclerotic disease risk factors are present within the first year of SLE. This study examines the accumulation of atherosclerotic risk factors over 3 years in a multicenter, international inception cohort of SLE patients according to ethnic groups. **Methods:** 27 centres from 11 countries assembled an inception cohort of SLE patients according to a standardized protocol between 2000 and 2006 to study risk factors for atherosclerosis. Simple statistics are provided. Comparisons between ethnic groups were made using chi square tests and analysis of variance. **Results:** Of the inception cohort of 1,091 SLE patients 304 have been followed for 3 years and constitute the population for this study. Patient characteristics were as follows *(Table I)*.

Accumulation of risk factors in the various ethnic groups over the first 3 years is shown in *table II*.

There was no difference in hypertension and hypercholesterolemia over three years in the various ethnic groups. Caucasians were more frequently smokers and post menopausal, had a higher frequency of family history of CAD, had a lower SLEDAI at enrollment and lower AMS at 3 year followup, and used less steroids and immunosuppressive agents than in the other groups *(Table II)*. Asians and Hispanics had higher SLEDAI at enrollment and higher 3-year AMS. SDI was higher among Black patients compared to the other ethnic groups and this was not related to the cardiac variables. There were no consistent differences in the other risk factors for CAD among the other ethnic groups. **Conclusion:** There are differences in accumulation of some risk fac-

Table I.

	Asian	Black	Caucasian	Hispanic	P value
N	40 (12.8)	42 (13.4)	174 (55.6)	48 (15.3)	
Sex F	35 (87.5)	35 (83.3)	148 (85.1)	41 (85.4)	0.99
Age at diagnosis	32.4 ± 11.4	32.2 ± 11.7	40.5 ± 15.6	26.0 ± 8.6	< 0.0001
Disease duration	2.6 ± 3.5	5.6 ± 3.3	5.6 ± 4.2	6.8 ± 4.0	< 0.0001
1st SLEDAI-2K	9.20 ± 5.91	4.73 ± 5.36	4.91 ± 5.34	5.06 ± 4.14	< 0.0001
3 yr AMS	5.83 ± 4.20	3.38 ± 3.25	3.19 ± 2.75	5.94 ± 3.70	< 0.0001
3 yr SDI	0.85 ± 1.31	1.45 ± 2.04	0.80 ± 1.18	0.64 ± 0.87	0.018

tors for AS among the ethnic groups but there were no differences in hypertension and hypercholesterolemia. Whether there will be differences in the development of CAD events among these ethnic groups remains to be elucidated.

Table II.

	Asian	Black	Caucasian	Hispanic	P value
Hypertension	18 (45.0)	27 (64.3)	100 (57.5)	27 (56.3)	0.35
Cholesterol	27 (67.5)	27 (64.3)	100 (57.5)	27 (56.3)	0.58
Smoker ever	11 (27.5)	14 (33.3)	87 (50.0)	18 (37.5)	0.02
Diabetes	1 (2.5)	1 (2.4)	10 (5.8)	2 (4.2)	0.69
Menopause	5 (14.3)	4 (11.4)	53 (35.8)	1 (2.4)	< 0.0001
Waist > 80F > 90M	24 (61.5)	24 (60.0)	98 (59.0)	21 (43.8)	0.19
Sedentary	25 (62.5)	17 (41.5)	74 (43.5)	44 (91.7)	< 0.0001
Fam. hist. CAD	4 (10.0)	9 (21.4)	62 (35.6)	5 (10.4)	0.0002
Nephrotic syndrome	10 (25.0)	9 (21.4)	12 (6.9)	13 (27.1)	0.0002
Corticosteroids	36 (90.0)	39 (92.9)	115 (66.1)	47 (97.9)	< 0.0001
Antimalarials	40 (100)	28 (66.7)	138 (79.3)	33 (68.8)	0.0006
Immunosuppressives	26 (65.0)	29 (69.1)	81 (46.6)	41 (85.4)	< 0.0001

Presentation number: 1133
Serum and cerebrospinal fluid (CSF) autoantibodies in patients with neuropsychiatric lupus erythematosus (NPSLE)

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The significance of autoantibodies with neuropsychiatric (NP) manifestations in SLE is still to be defined. **AIM:** To assess the association of serum and CSF autoantibodies with NPSLE. **Methods:** Forty-nine consecutive SLE (ACR) patients, hospitalized because of NPSLE were included. All the patients were evaluated at hospitalization and six months later using a standardized format. A serum and CSF sample (49/42 at hospitalization and 39/30 six months later) were obtained. As controls, serum was obtained from 49 non-NPSLE patients at hospitalization because of disease activity and six months later, and serum and CSF samples from 6 SLE patients with septic meningitis, 16 surgical SLE patients without history of NPSLE, and 26 patients with non-autoimmune diseases without history of NP manifestations. IgG antinuclear antibodies were detected by indirect immunofluorescence; IgG anti-dsDNA, anti-ribosomal P, anticardiolipin, anti-α2 glycoprotein I antibodies were detected by immunoenzymatic assay; IgG anti-NR2 glutamate receptor antibody (NDMAR) were detected by ELISA. **Results:** Clinical manifestations at hospitalization included, 16 seizures, 9 severe refractory headaches, 8 confusional states, 7 cerebrovascular diseases, 3 psychosis, 3 multiplex mononeuritis, 1 transverse myelitis, 1 polyneuropathy, and 1 pseudotumor cerebri. In serum, anti-ribosomal P antibodies were found more commonly among the NPSLE patients but also with infectious meningitis. Other autoantibodies did not show clear differences between the NPSLE and other SLE groups. In CSF, the prevalence of all the autoantibodies was higher among the NPSLE patients and infectious meningitis than the surgical SLE group; only the anti-NMDAR antibody was significantly higher in both SLE groups with neurological involvement than in the surgical group (P = 0.023 and 0.002, respectively). A non-significant trend towards higher prevalence among the LE patients with infectious meningitis than NPSLE patients was observed, being the anti-ribosomal P antibodies the ones that reached significance (P = 0.01). Six months later only serum anti-dsDNA and antinuclear antibodies showed a significant decrease in the NPSLE and non-NPSLE groups, respectively (P = 0.001 for both). In CSF, the prevalence of all the antibodies studied in the NPSLE group remained similar to the determination at baseline, but the titers of anti-dsDNA and anti-NMDAR antibodies tended to decrease. Only patients with central or diffuse NP manifestations had anti-NR2 glutamate receptor antibodies. **Conclusion:** The presence of autoantibodies in CSF of SLE patients is driven by damage to the blood brain barrier. The role played in NPSLE is yet to be clarified.

Presentation number: 1186
Composite indices for disease activity in ankylosing spondylitis (AS) and psoriatic arthritis (PSA)

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Background: The INSPIRE study documented the interobserver reliability of clinical assessment in patients with AS and PsA. Composite indices, including the Bath AS metrology Index (BASMI) and the Edmonton AS metrology Index (EDASMI), have been proven reliable in AS. However, whether the composite indices are reliable in PsA is unclear. **Objectives:** To determine whether the composite indices used in patients with AS, namely BASMI and EDASMI are reliable in patients with AS and PsA, and to determine whether new versions of the instruments work as well for both AS and PsA using the INSPIRE data. **Methods:** INSPIRE included a group of 20 rheumatologists from 11 countries with expertise in spondyloarthritis (SpA) who met together for a combined physical examination exercise to assess 10 patients with PsA with axial involvement (9 males 1 female, mean age 52, disease duration 17 yrs) and 9 AS patients (7 males 2 females, mean age 38, disease duration 16 yrs). A Latin Square design that enabled assessment of patient, assessor and order effect was used. Measures included were: occiput to wall, tragus to wall, cervical rotation, chest expansion, lateral spinal bending, modified Schober, and hip mobility. Data were analyzed using intracalss correlations (ICC) adjusted for order of measurements. Both the original BASMI(0-2) and its modification BASMI10 as well as the original EDASMIt (using tape measure for cervical rotation) and its modification EDASMIg using goniometer for cervical rotation were compared. **Results:**

Measurement	AS	95% CI	PsA (spinal)	95% CI
BASMI (0-2)	0.92	0.82, 0.98	0.89	0.77, 0.96
BASMI10	0.60	0.36, 0.85	0.90	0.80, 0.97
EDASMIt	0.69	0.47, 0.90	0.85	0.71, 0.95
EDASMIg	0.82	0.65, 0.95	0.91	0.82, 0.97

Both indices were equally reliable in patients with PsA. In patients with AS the original BASMI produced higher ICC than EDASMI, likely due to the differences in the measurement of cervical rotation. Indeed, when the goniometer method results were substituted for the tape measure for cervical rotation, the results for EDASMIg were much improved for AS and PsA. BASMI 10 was not as good in AS, with lower ICC and wider confidence intervals than the original BASMI whereas in PsA both produced similar results. **Conclusion:** The INSPIRE study thus confirms that measures of spinal mobility are reliable for AS. It further demonstrated that composite measures of spinal mobility that have been applied to primary AS perform well with respect to inter-observer reliability when applied to PsA patients with axial involvement.

Presentation number: 1395
Cardiac valve replacement in aps patients

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Purpose: Cardiac valvular lesions are commonly found in patients with the antiphospholipid syndrome (APS). However, only a small group of these APS patients require valvular replacement. Reports of valvular surgery in APS patients are scarce. In this multicenter study, we retrospectively analyzed the results of the heart valve replacement in our APS patients with valvular involvement. **Methods:** Clinical manifestations (cardiac involvement and APS characteristics), operative and postoperative courses and long-term follow-up were reviewed using the same protocol in all participating centres. All patients fulfilled Sapporo criteria for APS. **Results:** Between 1981 and 2005, 25 valvular replacements were carried out in 24 APS patients. The mean age was 43.2 ± 14.6 years. Twenty-two patients were females. Primary APS was present in 18 and in 6 patients APS was associated with systemic lupus erythematosus. Mean follow-up post-surgery was 44 ± 36.1 months. Mitral valve was replaced in 11 patients, aortic valve in 7 and 6 patients had multiple valve replacement. Twelve patients had pulmonary hypertension. Mechanical valve replacement was performed in 17 patients (68%) while 8 patients received a biologic valve (32%). One patient died during surgery (cardiogenic shock). During the first month after surgery 6 patients (24.9%) had serious complications (4 major bleeding, 1 atrial thrombosis and 1 cardiac tamponade requiring another heart surgery). Three patients (13%) died during follow-up (1 septic shock, 1 after renal transplantation and 1 due to haemorrhagic stroke). A considerable number of patients (43%) had serious complications during the follow-up period (1 cardiac failure, 1 valvular thrombosis, 2 transient ischaemic attacks, 1 peripheral thrombo-embolic disease and 5 major bleeding). A second valve replacement was required in 1 patient due to thrombosis in the previously replaced valve. **Conclusions:** Morbidity and mortality was high in our APS patients who underwent heart valve replacement surgery. Valve replacement in APS patients is a high risk procedure. Anticoagulation must be carefully controlled for the prevention of haemorrhagic and thrombotic complications in these patients.

Presentation number: 1752
Collagen-polyvynilpirrolidone down-regulates inflammation in collagen induced arthritis in a murine model

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Purpose: The aim of the study was to evaluate the effect of intradermal Collagen-Polyvynilpirrolidone (Clg-PVP) or matrikines administration on a type II collagen (ClgII)-induced arthritis (CIA) murine model. **Methods:** Nine male age-matched mice were immunized intradermally at the base of the tail with 100 μg of chicken ClgII emulsified in complete Freund's adjuvant. Mice were then boosted with 100 μg of ClgII in incomplete Freund's adjuvant at 21 day. Mice were treated one week after boost with 100 μL of **(a)** placebo, **(b)** matrikines (hydrolyzed-collagen and elastin), **(c)** Clg-PVP, **(d)** b + c, **(e)** methotrexate (2.5 mg/kg), **(f)** c + e, and **(g)** b + c + e every week during one month. Clinical scores were assessed immediately before immunization (day 0) and thereafter weekly. Inflammation of the four paws was scored as follows: 0, no inflammation; **1,** swelling or redness of one joint; **2,** swelling or redness of more than one joint or mild inflammation of the whole paw; **3,** severe inflammation of whole paw or ankylosis. **Results:** The incidence of CIA was of 100% by day 28 in ClgII challenged mice. Clinical and morphometric analysis (weight, temperature and paw thickness) showed a down-regulation of inflammation post administration of treatments (c), (e) and (f) *vs* placebo ($p \leq 0.05$). The histological analysis showed that CIA-mice group (a) had extensive bone erosion, pannus and severe focal inflammatory infiltrates. Meanwhile (c), (e) and (f) mice-treated groups had a normal architecture. Bone erosion and inflammation in (c), (e) and (f) mice-treated groups were scarce or absent when compared to CIA-mice group. **Conclusions:** Clg-PVP exerts a down-regulation of pro-inflammatory process on established inflammation and is able to ameliorate the tissue damage associated with CIA.

Presentation number: 1921
Prevalence of menopausal symptoms in patients with systemic lupus erythematosus (SLE)

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Menopausal symptoms in SLE patients have not been studied. AIM. To determine the prevalence of menopausal symptoms in SLE patients. **Methods:** SLE patients (≥ 4 ACR criteria), 16-60 years old, were face to face interviewed using a standardized questionnaire. Included variables were grouped as follows: general information (date of birth, years of schooling), smoking habit, gynecobstetric history (menopause status, hysterectomy, pregnancy, hormonal contraceptives use, date of last menstrual period, regularity of cycles), current treatment (corticosteroids and other immunosupressants) and menopausal symptoms during last 2 weeks (vasomotor, genitourinary and psychological symptoms). Frequency by week and intensity of hot flushes was asked. Postmenopausal status was defined as amenorrhea ≥ 12 months. Women with history of hysterectomy were excluded from the analysis. **Statistical analysis:** Descriptive statistic, odds ratios (95% CI) and logistic regression; p value was set < 0.05 two tailed. **Results:** The mean [SD] age of 764 consecutive outpatients at the interview was 34.7 [10.2] years (premenopausal, 31.9 [8.2]; postmenopausal, 47 [9.2] years).

Symptoms	Premenopausal n = 625	Postmenopausal n = 139	p
Depressed mood, *n(%)*	357 (57.1)	78 (56.1)	0.84
Forgetfullness, *n(%)*	283 (45.3)	85 (61.2)	0.001
Insomnia, *n(%)*	255 (40.8)	73 (52.5)	0.011
Vaginal dryness, *n(%)*	150 (24)	65 (46.8)	< 0.0001
Urinary incontinence, *n(%)*	167 (26.7)	46 (33.1)	0.089
Hot flushes, *n(%)*	143 (22.9)	60 (43.2)	< 0.0001
Night sweats, *n(%)*	136 (21.8)	56 (40.3)	< 0.0001
Diminished sexual interest, *n(%)* from *n* with active sexual life	182 (45) from 404	58 (78.4) from 74	< 0.0001

Less postmenopausal patients were receiving corticosteroids (p = 0.004) and antimalarials (p = 0.001) than premenopausal. Mean corticosteroids dose was not different (p = 0.86). In premenopausal, but not at postmenopausal, women corticosteroids use was associated with hot flushes (OR 2.1, 95%CI; 1.4-3.2, p = 0.0004) and night sweats (OR 1.8, 95% CI; 1.2-2.9, p 0.004),. Symptoms predicting menopause were vaginal dryness (p = 0.001), diminished sexual interest (p = 0.001) and night sweats (p = 0.039). **Conclusions:** Symptoms attributable to menopause are highly prevalent in pre and postmenopausal SLE patients. At premenopause, prednisone use is associated with vasomotor symptoms.

Presentation number: 1960
Autoantibodies and neuropsychiatric events at diagnosis of systemic lupus erythematosus

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Purpose: To examine the association between neuropsychiatric (NP) events occurring at diagnosis of SLE with antiphospholipid antibodies (lupus anticoagulant, anticardiolipin, anti-β2 glycoprotein-I), anti-ribosomal P and anti-NR2 glutamate receptor antibodies in an international inception cohort. **Methods:** Patients were enrolled within 15 months of diagnosis of SLE. All NP events were classified using the ACR case definitions for 19 NP syndromes and clustered into central/peripheral and diffuse/focal events. Two sets of decision rules of different stringency (model A and model B) were used to determine the attribution of NP events to SLE. The measurement of IgG autoantibodies was centralized and performed without knowledge of NP events or their attribution. **Results:** A total of 412 patients (87.3% female) with a mean (± SD) age of 34.9 ± 13.5 years were studied. The mean disease duration was 5 ± 4.2 months. Within the enrollment window 133/412 (32.3%) patients had 1 or more NP events. There were 214 events, encompassing 14 of 19 NP syndromes. The proportion of NP events attributed to SLE varied from 15% (model A) to 36% (model B). Lupus anticoagulant, anticardiolipin, anti-β2-GPI, anti-ribosomal P and anti-NR2 antibodies were detected in 18%, 18%, 16%, 8% and 19% of patients respectively. There was no significant association between autoantibodies and NP events from all causes. When NP events were classified by attribution the frequency of anti-ribosomal P antibodies in patients with NP events due to SLE using the most stringent attribution rules (model A) was 4/24 (16.6%) compared to 3/109 (2.8%) for patients with all other NP events and 24/279 (8.6%) in patients with no NP events. The strongest associations for anti-ribosomal P antibodies were with central (P = 0.04) and diffuse (P = 0.02) NP events. Thus, for central NP events the frequency of anti-ribosomal P antibodies in patients with NP events attributed to SLE (model A) was 4/20 (20%) compared to 3/107 (2.8%) for patients with all other central NP events and 24/279 (8.6%) in patients with no NP events. For diffuse NP events the antibody frequencies were 3/11 (27%) compared to 4/111 (3.6%) and 24/279 (8.6%) respectively. **Conclusion:** NP events occurring as part of the presentation of SLE were associated with anti-ribosomal P antibodies, suggesting a pathogenetic role for this autoantibody. Conversely there was no association between NP events at diagnosis of SLE with either lupus anticoagulant, anticardiolipin, anti-β2 glycoprotein-I, and anti-NR2 glutamate receptor antibodies.

Presentation number: 2178
The long-term outcome of juvenile idiopathic inflammatory myopathies: a multicenter, multinational study of 557 patients

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Objective: To investigate the long-term outcome of a multicenter cohort of patients with juvenile idiopathic inflammatory myopathies (IIM) seen over a 20-year period. **Methods:** All patients with juvenile IIM and disease duration > 2 years seen at participating centers after 1980 were identified. Patients were then located and asked to undergo a cross-sectional assessment. The study included retrospective assessment of onset features, disease course and drug therapies, and cross-sectional assessment of disease activity, muscle strength, functional ability, accumulated damage,

and health-related quality of life (HRQL). Patients who died received retrospective assessments, including damage assessment, until last visit before death. **Results:** 654 patients (96% with JDM) were identified in 30 centers in 5 countries (Italy, UK, Mexico, Brazil, Argentina) and 557 of them (85%) underwent study assessments. At cross-sectional assessment: 42% and 54% of patients had abnormal muscle strength (MMT and CMAS, respectively); 46% and 61% of patients had ongoing disease activity (MITAX and DAS, respectively); 47% of patients had abnormal CHAQ score; 69% of patients had cumulative damage (MDI) in one or more organ system (57% skin, 37% muscle, 28% skeletal); 11% and 5% of patients had a HRQL (CHQ) in the physical and psychosocial domain, respectively, > 2 standard deviation below the mean of healthy children. **Conclusion:** At > 2 years after onset, a substantial proportion of patients with juvenile IIM had persistently active disease and cumulative organ damage. Reassuringly, only few patients had major impairment in HRQL. This study was supported by The Myositis Association.

Presentation number: CRC05
Takayasu´s arteritis in mexican mestizos patients: clinical, laboratory and angiographic findings and the cause of death

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Objectives: To investigate the clinical manifestations, laboratory data, angiographic findings, treatment and the cause of death in patients with Takayasu´s Arteritis (TA). **Methods:** 50 patients seen at the Hospital Especialidades Centro Médico Nacional «La Raza» were studied in a retrospective way from 1980 to 2006 who met criteria of the ACR classification for TA. Clinical manifestations; angiographic findings according to Moriwaki; laboratory data: human leukocyte antigen (HLA) alleles by microlymphotoxicity, anticardiolipin antibodies; treatments and causes of the death were investigated in the charts. **Results:** There were 48 women and 2 men with an average age at onset of TA of 26 ± 12 yrs. Present age of patients is 38 ± 14 yrs, with an average disease evolution of 16 ± 12. The main clinical manifestations were as follows: cardiovascular characterized by decrease and/or absence of pulses 47 (94%), claudication of extremities 46 (92%), vascular murmurs 40 (89%), arterial hypertension 25 (50%), aortic insufficiency 25 (50%), ischemic cardiopathy 8 (6%): 4 patients with angina and 4 with myocardial infarction. Neurological manifestations: headache 40 (80%), dizziness 27 (54%), cerebrovascular disease (CVD): 4 (8%), 3 infarctions and one hypertensive hemorrhage; ocular involvement: hypertensive retinopathy 13 (26%) and Takayasu's retinopathy 12 (24%); blindness 4 (8%), cataracts 3 (6%); transverse myelitis secondary to involvement of Adamkiewics artery 1 (2%). Skeletal-muscle manifestation: arthralgias 30 (60%), myalgias 20 (40%). Cutaneous manifestations: erythema nodosum 3 (6%). Laboratory findings: normocityc normochromic anemia 33%, erythrocyte sedimentation rate increased 92%, anticardiolipin antibodies (25%) were positive at low titers. The most frequent HLA were B5 and B7. The classification by arteriography was as follows: Type I = 5, IIa = 5, IIb = 10, III = 10, IV = 5 and V = 15. All patients were treated with steroids by the oral route; in addition 15 patients with severe TA received methilprednisolone pulses (an average of 10 pulses monthly) with an adequate response demonstrated by clinical improvement and post treatment artheriography; other 5 patients with refractory disease received cyclophosphamide pulses with clinical improvement and 10 patients received methotrexate, as a maintenance treatment. We observed 5 deaths (10%): myocardial infarction 2, CVD: 2, postsurgical complications one. **Conclusion:** In this cohort of Mexican mestizos patients with TA, the main clinical manifestations and cause of mortality were cardiovascular and neurological. HLA B5 was the most frequent allele. Metilprednisolone pulses were useful in the treatment of severe TA.

Presentation number: 192
Site-specific prevalence of osteoarthritis (oa) in two prehispanic mexican populations. A paleopathologic study

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Purpose: To establish the prevalence and anatomic distribution of OA findings between two prehispanic populations with different physical activities: hunter-gatherers [South Region of Baja California (SRBC)] and agriculturalists [Cuicuilco, Valley of Mexico (CVM)]. **Methods:** A descriptive analysis of two human skeletal remains collections preserved at the Direction of Physical Anthropology of the National Museum of Anthropology in Mexico City. Their antiquity ranged from 600-150 BC (CVM) and 1320-1420 AD (SRBC). A macroscopic visual examination was performed on each skeleton to assess the occurrence of OA, as defined by the presence of osteophyte formation on the articular surfaces. Age and gender determinations were made by physical anthropology standard techniques. Estimated age was categorized into four groups: 20-29, 30-39, 40-49 and 50-yr or older. Skeletons in which the preservation conditions limited its evaluation and those under 20-yr old were excluded. The areas evaluated were: shoulder, elbow, hip, knee and axial skeleton (cervical, thoracic and lumbar spine). Statistics: Descriptive analysis included mean, standard deviation (SD) and proportions. Inferential analysis was supported by: *t* test for parametric and continued variables, two-tail z test was used for non-parametric variables. **Results:** Both collections comprised a total of 231 skeletons, 130 specimens were excluded. Of the 101 specimens included, 57 (56.4%) were from SRBC and 44 (43.5%) from CVM. Gender: 43% female, 50 % male, and 7% unknown. Mean age from SRBC was 29.9-yr (± 6.8) *vs* CVM

35.5-yr (± 9.2) ($p = 0.0006$). Frequency analysis showed a greater proportion of shoulder and thoracic spine OA in CVM population (44% *vs* 19.1% [$p < 0.009$] and 36% *vs* 6.8% [$p = 0.04$], respectively). However, in SRBC population knee OA was more prevalent (67.4% *vs* 52.5% [$p < 0.03$]). A gender sub-analysis showed a greater proportion of knee OA (68%) and lumbar spine OA (55%) in male, *vs* female 48% ($p = 0.016$) and 46% ($p < 0.032$), respectively. However, female displayed a greater proportion of elbow OA (46% *vs* 33.8% [$p < 0.033$]). Male agriculturalists showed a higher frequency of axial skeleton and shoulder OA when compared with hunter-gatherers males ($p < 0.02$). Conversely, hunter-gatherers displayed a tendency to present more hip OA ($p < 0.057$). **Conclusions:** Contributions of palaeorheumatology help to understand contemporary diseases. Results of this study support the notion that anatomic distribution of OA vary among different groups, and may be the consequence of biomechanical stress imposed by physical and occupational activities of ancient populations.