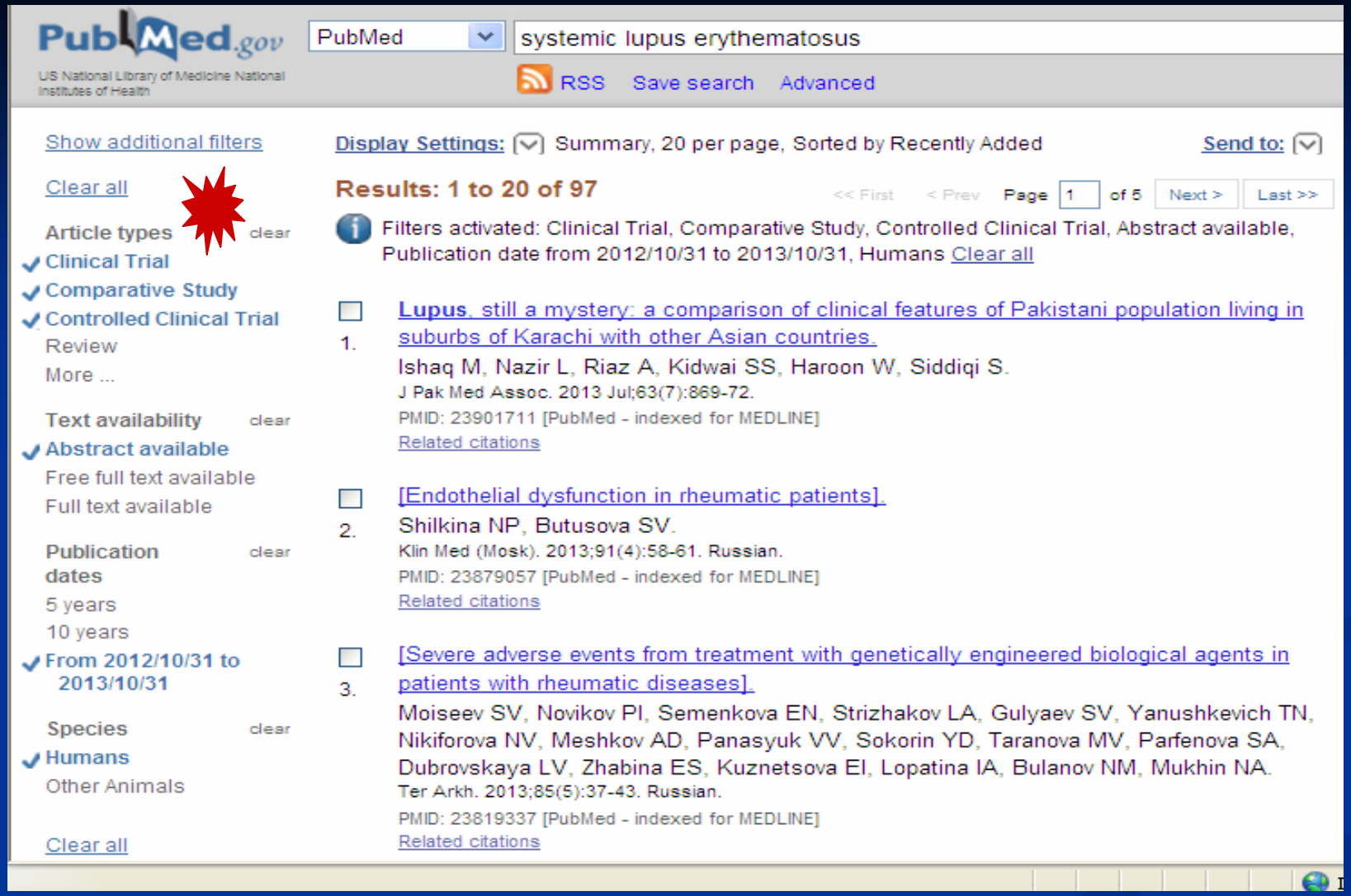
“Novedades en LES”

Juan Jiménez Alonso. Granada


PubMed.gov
US National Library of Medicine National Institutes of Health
PubMed
systemic lupus erythematosus
RSS
Save search
Advanced
Show additional filters
Clear all
Article types
clear
Clinical Trial
Comparative Study
Controlled Clinical Trial
Review
More ...
Text availability
clear
Abstract available
Free full text available
Full text available
Publication dates
clear
5 years
10 years
From 2012/10/31 to 2013/10/31
Species
clear
Humans
Other Animals
Clear all
Display Settings: Summary, 20 per page, Sorted by Recently Added
Send to:
Results: 1 to 20 of 97
<< First
< Prev
Page 1 of 5
Next >
Last >>
Filters activated: Clinical Trial, Comparative Study, Controlled Clinical Trial, Abstract available, Publication date from 2012/10/31 to 2013/10/31, Humans Clear all
1. Lupus, still a mystery: a comparison of clinical features of Pakistani population living in suburbs of Karachi with other Asian countries.
Ishaq M, Nazir L, Riaz A, Kidwai SS, Haroon W, Siddiqi S.
J Pak Med Assoc. 2013 Jul;63(7):869-72.
PMID: 23901711 [PubMed - indexed for MEDLINE]
Related citations
2. [Endothelial dysfunction in rheumatic patients].
Shilkina NP, Butusova SV.
Klin Med (Mosk). 2013;91(4):58-61. Russian.
PMID: 23879057 [PubMed - indexed for MEDLINE]
Related citations
3. [Severe adverse events from treatment with genetically engineered biological agents in patients with rheumatic diseases].
Moiseev SV, Novikov PI, Semenkova EN, Strizhakov LA, Gulyaev SV, Yanushkevich TN, Nikiforova NV, Meshkov AD, Panasyuk VV, Sokorin YD, Taranova MV, Parfenova SA, Dubrovskaya LV, Zhabina ES, Kuznetsova EI, Lopatina IA, Bulanov NM, Mukhin NA.
Ter Arkh. 2013;85(5):37-43. Russian.
PMID: 23819337 [PubMed - indexed for MEDLINE]
Related citations

J Pak Med Assoc. 2013 Jul;63(7):869-72.

Lupus, still a mystery: a comparison of clinical features of Pakistani population living in suburbs of Karachi with other Asian countries.

Ishaq M, Nazir L, Riaz A, Kidwai SS, Haroon W, Siddiqi S.

Department of Medicine, Jinnah Medical College Hospital, Karachi, Pakistan.

Abstract

OBJECTIVE: To determine the presenting features of patients with systemic lupus erythematosus at a private hospital in Karachi, and to compare the features with those of other Asian populations.

METHODS: The retrospective study comprised records of all lupus cases meeting the revised American Rheumatism Association criteria at the time of presentation at Jinnah Medical College Hospital, Karachi, from May 2008 to June 2011. Demographic and clinical data was analysed using SPSS 11.5.

RESULTS: Of the 105 cases in the study, there were 6 (5.7%) males and 99 (94.3%) females, with a male-to-female ratio of 1:16 and a mean age of 31.6+/-10.5 years. Clinical manifestations included: constitutional symptoms in (n=69; 65.7%), arthropathy (n=81; 77%), cutaneous involvement (n=39; 37%), lupus nephritis (n=24; 22.8%), pleurisy (n=9; 8.6%), Raynaud's phenomenon (n=24; 22.8%), and vasculitis (n=18; 17%). One (0.95%) patient presented with mononeuritis multiplex, and 1 (0.95%) with acute pancreatitis.

CONCLUSION: The diversity in clinical presentation appeared to be a reflection of the great variability that exists among Asian countries with regards to their genetic, environmental and socio-demographic backgrounds. The differences also existed in our own population, suggesting some unknown etiology.

Índice

- Morbimortalidad perioperatoria
- Vacuna papilomavirus
- Tratamiento con Vitamina D
- Micofenolato
- Trasplante de médula ósea

Arthritis Care Res (Hoboken). 2013 Jun;65(6):986-91. doi: 10.1002/acr.21915.

Short-term perioperative all-cause mortality and cardiovascular events in women with systemic lupus erythematosus.

Yazdanyar A, Wasko MC, Scalzi LV, Kraemer KL, Ward MM.

Section of Hospital Medicine, Department of Medicine, The Reading Hospital and Medical Center, West Reading, PA 19611, USA. a.yazzzd@gmail.com

Abstract

OBJECTIVE: Persons with systemic lupus erythematosus (SLE) are at an increased risk of cardiovascular disease (CVD) events, but this excess CVD burden in the perioperative setting is yet to be determined. We aimed to determine the risk of perioperative short-term all-cause mortality and CVD events among women with SLE compared to those without SLE.

METHODS: We conducted a cross-sectional analysis of pooled hospital discharge data of the Nationwide Inpatient Sample from 1998-2002. We abstracted diseases and procedures using International Classification of Diseases, Ninth Revision, Clinical Modification codes. The principal procedure was categorized into either a low, intermediate, or high risk level. Survey logistic regression adjusting for potential confounders provided estimates for stratum-specific odds of adverse events in women with SLE relative to those without SLE for each procedure risk level.

RESULTS: All-cause mortality was significantly greater among women with SLE having a low- (odds ratio [OR] 1.54, 95% confidence interval [95% CI] 1.00-2.37) or a high-risk principal procedure (OR 2.52, 95% CI 1.34-4.75) relative to women without SLE, but did not differ significantly among persons with intermediate-risk procedures. Women with SLE with a low-risk procedure were also more likely to experience a composite CVD event relative to women without SLE (OR 1.40, 95% CI 1.04-1.87).

CONCLUSION: Women with SLE are at an increased risk for short-term perioperative adverse events. These results highlight a need for greater scrutiny during perioperative evaluation and management of women with SLE.

Table 1. Characteristics of hospitalized women by procedure risk level and lupus status*

	Low risk (n = 3,640,994)			Intermediate risk (n = 1,513,597)			High risk (n = 112,998)		
	SLE (n = 13,263)	Non-SLE (n = 3,627,731)	P†	SLE (n = 6,237)	Non-SLE (n = 1,507,360)	P†	SLE (n = 1,019)	Non-SLE (n = 111,979)	P†
Age, mean ± SE years	49.3 ± 0.6	45.1 ± 0.5	< 0.001	50.3 ± 0.5	54.7 ± 0.2	< 0.001	48.9 ± 1.3	67.1 ± 0.3	< 0.001
Hypertension	29.0 (1.1)	16.7 (0.5)	< 0.001	34.0 (1.4)	28.1 (0.4)	< 0.001	32.8 (3.4)	45.8 (0.7)	< 0.001
CAD	10.6 (0.7)	8.1 (0.4)	< 0.001	5.5 (0.7)	4.7 (0.1)	0.26	13.5 (2.3)	28.0 (0.7)	< 0.001
CHF	7.7 (0.6)	5.4 (0.2)	< 0.001	3.2 (0.5)	2.0 (0.1)	0.02	9.4 (1.9)	14.6 (0.4)	0.01
Valvular heart disease	0.8 (0.2)	0.6 (0.1)	0.25	0.6 (0.2)	0.3 (0.0)	0.13	3.4 (1.4)	6.0 (0.4)	0.07
DM	12.1 (0.7)	8.8 (0.3)	< 0.001	8.1 (0.7)	10.4 (0.1)	0.002	14.8 (2.9)	28.2 (0.7)	< 0.001
CKD	3.6 (0.5)	0.5 (0.03)	< 0.001	3.9 (0.8)	0.3 (0.03)	< 0.001	26.4 (3.9)	3.8 (0.4)	< 0.001

* Values are the percentage (linearized SE) unless otherwise indicated. SLE = systemic lupus erythematosus; CAD = coronary artery disease; CHF = congestive heart failure; DM = diabetes mellitus; CKD = chronic kidney disease.
† For categorical data based on the Rao-Scott chi-square test.

Ann Rheum Dis. 2013 May;72(5):659-64. doi: 10.1136/annrheumdis-2012-201393. Epub 2012 May 15.

Immunogenicity and safety of a quadrivalent human papillomavirus vaccine in patients with systemic lupus erythematosus: a case-control study.

Mok CC, Ho LY, Fong LS, To CH.

Department of Medicine, Tuen Mun and Pok Oi Hospital, New Territories, Hong Kong, SAR China. ccmok2005@yahoo.com

Abstract

OBJECTIVES: To evaluate the immunogenicity and safety of GARDASIL, a quadrivalent human papillomavirus (HPV) vaccine, in patients with systemic lupus erythematosus (SLE).

METHODS: Women with SLE aged 18-35 years who had stable disease were recruited to receive GARDASIL vaccination and an equal number of age-matched healthy women were also vaccinated. Seroconversion rates of antibodies to HPV serotypes 6, 11, 16 and 18 at months 7 and 12 and adverse events (AEs) were compared between patients and controls. The rate of disease flares in SLE participants was compared with matched SLE controls.

RESULTS: 50 patients with SLE and 50 healthy controls were studied. The mean age and disease duration of the patients was 25.8±3.9 years and 6.6±4.5 years, respectively. At month 12 the seroconversion rates of anti-HPV serotypes 6, 11, 16 and 18 in patients and controls were 82%, 89%, 95%, 76% and 98%, 98%, 98%, 80%, respectively. In patients with SLE there were no significant changes in the titres of anti-dsDNA, complements, anti-C1q and SLE Disease Activity Index scores from baseline to months 2, 7 and 12. There was one mild/moderate SLE flare at months 0-2, two mild/moderate flares at months 3-6 and six mild/moderate and two severe flares at months 7-12. Disease flares in patients with SLE occurred at a similar frequency to that of 50 matched SLE controls (0.22/patient/year vs 0.20/patient/year, p=0.81). Injection site reaction was the commonest AE (5%), and the incidence of AEs was comparable between patients with SLE and controls.

CONCLUSIONS: The quadrivalent HPV vaccine is well tolerated and reasonably effective in patients with stable SLE and does not induce an increase in lupus activity or flares.

Juan Jiménez Alonso. Granada

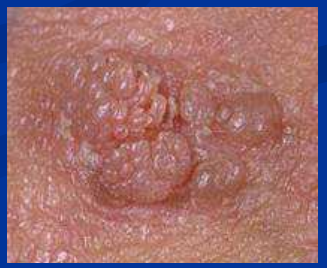


Table 2 Seroconversion of IgG anti- human papillomavirus (HPV) serotypes 6, 11, 16 and 18 at months 7 and 12 after vaccination

	Month 7			Month 12		
HPV type	Patients with SLE	Controls	p Value	Patients with SLE	Controls	p Value
6	29/39 (74%)	43/45 (96%)	0.01	32/39 (82%)	44/45 (98%)	0.02
11	29/38 (76%)	42/44 (95%)	0.02	34/38 (89%)	43/44 (98%)	0.18
16	36/39 (92%)	43/44 (98%)	0.34	37/39 (95%)	43/44 (98%)	0.60
18	29/38 (76%)	37/40 (93%)	0.06	29/38 (76%)	32/40 (80%)	0.69

SLE, systemic lupus erythematosus.

Ann Rheum Dis 2013;**72**:659–664. doi:10.1136/annrheumdis-2012-201393

J Rheumatol. 2013 Mar;40(3):265-72. doi: 10.3899/jrheum.111594. Epub 2012 Dec 1.

The effect of vitamin D supplementation on inflammatory and hemostatic markers and disease activity in patients with systemic lupus erythematosus: a randomized placebo-controlled trial.

Abou-Raya A, Abou-Raya S, Helmii M.

Internal Medicine Department, Faculty of Medicine, University of Alexandria, Rheumatology Division, Alexandria, Egypt. annaaraya@yahoo.com

Abstract

OBJECTIVE: Systemic lupus erythematosus (SLE) is a chronic multisystem inflammatory autoimmune disease. Vitamin D has potent immunomodulatory properties that support its use in the treatment of autoimmune conditions, including SLE. We assessed vitamin D status in patients with SLE and determined alterations in inflammatory and hemostatic markers and disease activity before and after vitamin D supplementation.

METHODS: Patients with SLE (n = 267) were randomized 2:1 to receive either oral cholecalciferol 2000 IU/day or placebo for 12 months. Outcome measures included assessment of alterations in levels of proinflammatory cytokines and hemostatic markers, and improvement in disease activity before and after 12 months of supplementation. Disease activity was measured by the SLE Disease Activity Index. Vitamin D levels were measured by Liaison immunoassay (normal 30-100 ng/ml). Serum levels between 10 and 30 ng/ml were classified as vitamin D insufficiency and levels < 10 ng/ml as vitamin D deficiency.

RESULTS: The mean 25(OH)D level at baseline was 19.8 ng/ml in patients compared to 28.7 ng/ml in controls. The overall prevalence of suboptimal and deficient 25(OH)D serum levels among patients with SLE at baseline was 69% and 39%, respectively. Lower 25(OH)D levels correlated significantly with higher SLE disease activity. At 12 months of therapy, there was a significant improvement in levels of inflammatory and hemostatic markers as well as disease activity in the treatment group compared to the placebo group.

CONCLUSION: Vitamin D supplementation in patients with SLE is recommended because increased vitamin D levels seem to ameliorate inflammatory and hemostatic markers and show a tendency toward subsequent clinical improvement. Clinical Trial Registry NCT01425775.

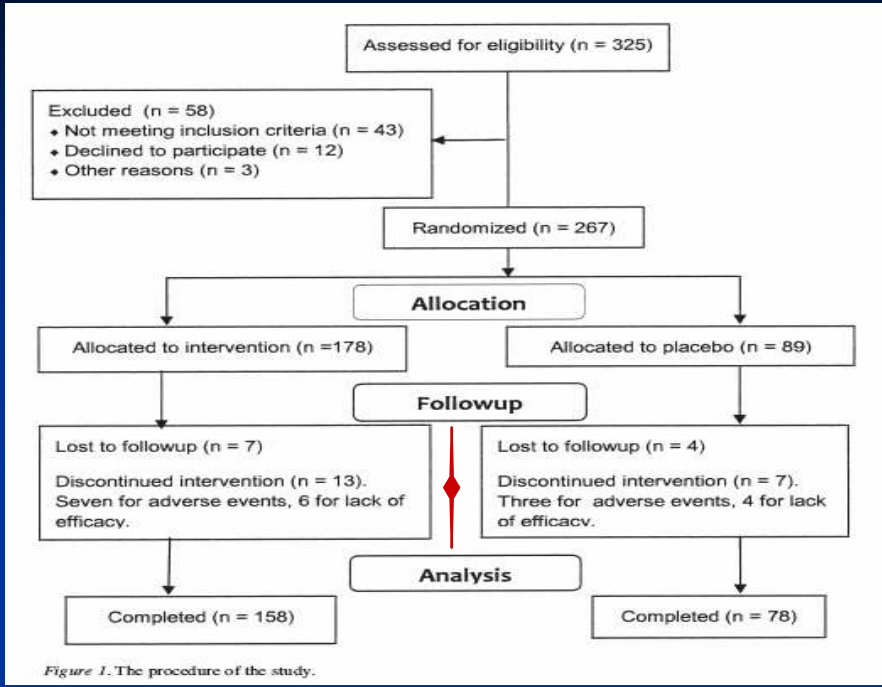


Figure 1. The procedure of the study.

Table 2. Mean levels of proinflammatory cytokines, and hemostatic and disease activity markers of the study participants at baseline and after 12 months. Values are mean (SD).

Measure	Intervention, n = 178	Placebo, n = 89	Controls, n = 175
IL-1, pg/ml			
Baseline	0.59 (0.91)*	0.60 (0.92)*	0.35 (0.45)
12 mo	0.43 (0.53)**	0.61 (0.89)	
IL-6, pg/ml			
Baseline	8.85 (6.75)*	8.82 (6.71)*	1.18 (2.21)
12 mo	5.11 (7.11)**	7.96 (7.77)	
IL-18, pg/ml			
Baseline	485.22 (199.45)*	483.01 (199.91)*	224.61 (89.93)
12 mo	400.05 (192.37)**	482.87 (198.34)	
TNF-α, pg/ml			
Baseline	8.80 (8.22)*	8.43 (8.12)*	0.94 (1.13)
12 mo	4.63 (7.79)**	8.01 (7.58)	
ESR, mm/h			
Baseline	35.52 (9.92)*	32.25 (10.11)*	10.6 (1.1)
12 mo	15.11 (4.47)**	30.18 (9.99)	
Anti-dsDNA, U/ml			
Baseline	55.8 (14.1)*	55.6 (14.2)*	11.8 (12.2)
12 mo	32.8 (12.7)**	44.8 (13.9)	
Anti-Sm, U/ml			
Baseline	10.79 (9.01)*	10.75 (8.81)*	0.9 (1.1)
12 mo	8.21 (7.82)**	9.99 (7.94)	
C4, mg/l			
Baseline	0.166 (0.091)	0.168 (0.089)	NA
12 mo	0.270 (0.071)**	0.171 (0.079)	
Fibrinogen, mg/dl			
Baseline	335.17 (99.01)*	332.42 (105.14)*	186.21 (48.11)
12 mo	259.97 (88.65)**	334.89 (98.93)	
vWF, pg/ml			
At baseline	228.23 (128.16)*	229.10 (127.81)*	132.58 (68.59)
12 mo	200.61 (106.35)**	233.44 (117.65)	

* Significantly different from control group. ** Significantly different from placebo group. NA: not applicable; vWF: von Willebrand factor; ESR: erythrocyte sedimentation rate; TNF-α: tumor necrosis factor-α.

Table 3. Serum vitamin D levels at baseline and at 12 months. Values are number (%) unless otherwise indicated.

Serum Vitamin D	All Patients with SLE, n = 267	Intervention, n = 178	Placebo, n = 89
Baseline			
Mean 25(OH)D, ng/ml, mean (SD)	19.8 (16.5)*	19.9 (16.3)	19.7 (16.7)
25(OH)D < 30 ng/ml	183 (69)	122 (69)	61 (68)
25(OH)D < 10 ng/ml	87 (33)	58 (33)	29 (33)
At 12 months			
Mean 25(OH)D, ng/ml	33.9 (16.7)*	37.8 (16.3)**	19.9 (16.2)
25(OH)D < 30 ng/ml	88 (33)	34 (19)	54 (61)
25(OH)D < 10 ng/ml	30 (11)	0 (0)	30 (34)

* Significantly different from control group. ** Significantly different from placebo group.

Table 5. Alterations in the SLE-related antibodies before and after 12 months of treatment. Values are mean (SD) unless otherwise indicated.

SLE-related Antibodies	Vitamin D Group	Placebo Group	p
Anti-dsDNA, U/ml			
Baseline	55.8 (14.1)	55.6 (14.2)	0.67
% positive	86	85	
12 months	32.8 (12.7)	44.8 (13.9)	0.05
% positive	67	82	
Anti-Sm, U/ml			
Baseline	10.79 (9.01)	10.75 (8.81)	0.66
% positive	25	24	
12 months	8.21 (7.82)	9.59 (7.94)	0.05
% positive	16	22	
C4 (mg/l)			
Baseline	0.166 (0.091)	0.168 (0.089)	0.65
12 months	0.270 (0.071)	0.179 (0.079)	0.05
Anticardiolipin IgG, GPL IU/ml			
Baseline	11.1 (2.3)	11.3 (2.5)	0.66
% positive	22	21	
12 months	10.9 (2.1)	11.1 (2.0)	0.59
% positive	18	19	
Anticardiolipin IgM, GPL IU/ml			
Baseline	7.9 (2.4)	7.8 (2.2)	0.61
% positive	18	17	
12 months	7.5 (2.1)	7.6 (2.5)	0.65
% positive	14	16	

ANA: antinuclear antibodies.

J Rheumatol. 2013 Mar;40(3):265-72. doi: 10.3899/jrheum.111594. Epub 2012 Dec 1.

The effect of vitamin D supplementation on inflammatory and hemostatic markers and disease activity in patients with systemic lupus erythematosus: a randomized placebo-controlled trial.

Abou-Raya A, Abou-Raya S, Helmii M.

Internal Medicine Department, Faculty of Medicine, University of Alexandria, Rheumatology Division, Alexandria, Egypt. annaaraya@yahoo.com

Abstract

OBJECTIVE: Systemic lupus erythematosus (SLE) is a chronic multisystem inflammatory autoimmune disease. Vitamin D has potent immunomodulatory properties that support its use in the treatment of autoimmune conditions, including SLE. We assessed vitamin D status in patients with SLE and determined alterations in inflammatory and hemostatic markers and disease activity before and after vitamin D supplementation.

METHODS: Patients with SLE (n = 267) were randomized 2:1 to receive either oral cholecalciferol 2000 IU/day or placebo for 12 months. Outcome measures included assessment of alterations in levels of proinflammatory cytokines and hemostatic markers, and improvement in disease activity before and after 12 months of supplementation. Disease activity was measured by the SLE Disease Activity Index. Vitamin D levels were measured by Liaison immunoassay (normal 30-100 ng/ml). Serum levels between 10 and 30 ng/ml were classified as vitamin D insufficiency and levels < 10 ng/ml as vitamin D deficiency.

RESULTS: The mean 25(OH)D level at baseline was 19.8 ng/ml in patients compared to 28.7 ng/ml in controls. The overall prevalence of suboptimal and deficient 25(OH)D serum levels among patients with SLE at baseline was 69% and 39%, respectively. Lower 25(OH)D levels correlated significantly with higher SLE disease activity. At 12 months of therapy, there was a significant improvement in levels of inflammatory and hemostatic markers as well as disease activity in the treatment group compared to the placebo group.

CONCLUSION: Vitamin D supplementation in patients with SLE is recommended because increased vitamin D levels seem to ameliorate inflammatory and hemostatic markers and show a tendency toward subsequent clinical improvement. Clinical Trial Registry NCT01425775.

Am J Kidney Dis. 2013 May;61(5):710-5. doi: 10.1053/j.ajkd.2012.11.042. Epub 2013 Feb 1.

Mycophenolate mofetil or intravenous cyclophosphamide for lupus nephritis with poor kidney function: a subgroup analysis of the Aspreva Lupus Management Study.

Walsh M, Solomons N, Lisk L, Jayne DR.

Department of Medicine (Nephrology), McMaster University, Hamilton, Canada. lastwalsh1975@gmail.com

Abstract

BACKGROUND: Mycophenolate mofetil (MMF) frequently is used as an alternative to intravenous cyclophosphamide to treat lupus nephritis. Whether MMF is adequate for patients with severely decreased kidney function at the time of treatment is uncertain.

STUDY DESIGN: We conducted a post hoc subgroup analysis of patients with low estimated glomerular filtration rates (eGFRs) from a large trial of MMF compared to cyclophosphamide in lupus nephritis.

SETTINGS & PARTICIPANTS: We included all patients with an eGFR <30 mL/min/1.73 m(2) from the Aspreva Lupus Management Study (ALMS).

INTERVENTION: MMF (target, 3 g/d) compared to monthly intravenous cyclophosphamide (0.5-1 g/m(2)).

OUTCOMES: We compared the proportion of patients that responded to therapy and change in eGFR over 24 weeks.

MEASUREMENTS: Response was evaluated by a decrease in proteinuria and stabilization or improvement of serum creatinine level.

RESULTS: Of 370 patients in ALMS, 32 were included in the subgroup analysis: 20 randomly assigned to MMF and 12 randomly assigned to cyclophosphamide treatment. The patients included were similar at baseline between groups. Four (20.0%) patients treated with MMF responded compared with 2 (16.7%) patients treated with cyclophosphamide (risk ratio, 1.2; 95% CI, 0.3-5.1; P = 0.9). eGFR in the MMF group improved more quickly than in the cyclophosphamide group, by 1.51 (95% CI, 0.99-2.02) mL/min/1.73 m(2) each week (P < 0.001). Serious adverse events occurred in 9 (45.0%) MMF-treated patients and 7 (63.6%) cyclophosphamide-treated patients (P = 0.5).

LIMITATIONS: Small sample size and post hoc subgroup of a larger trial.

CONCLUSIONS: We did not detect a difference in the primary outcome of response in patients with low eGFR treated with MMF or cyclophosphamide. However, MMF may result in quicker recovery of kidney function compared with those treated with cyclophosphamide. Larger studies including more patients with poor kidney function are warranted.

Lupus. 2012 Nov;21(13):1433-43. doi: 10.1177/0961203312458466. Epub 2012 Aug 24.

Efficacy of mycophenolate mofetil in adolescent patients with lupus nephritis: evidence from a two-phase, prospective randomized trial.

Sundel R, Solomons N, Lisk L; Aspreva Lupus Management Study (ALMS) Group.

Collaborators (94)

Boston Children's Hospital, Boston, MA 02115, USA.

Abstract

The safety and efficacy of mycophenolate mofetil (MMF) were evaluated in adolescent patients with systemic lupus erythematosus and active or active/chronic class III-V lupus nephritis. During the 24-week induction phase, patients were randomized to oral MMF (target dose 3.0 g/day) or intravenous cyclophosphamide (IVC) (0.5-1.0 g/m(2)/month), plus prednisone. Response was defined as a decrease in 24-hour urine protein:creatinine ratio (P:Cr) to < 3 in patients with baseline nephrotic range proteinuria, or by ≥ 50% if subnephrotic baseline proteinuria, and stabilization (± 25%) or improvement in serum creatinine. In the 36-month maintenance phase, induction therapy responders were randomized 1:1 to MMF (1.0 g twice daily) or oral azathioprine (AZA) (2 mg/kg/day), plus prednisone. In the induction phase, 10 patients received MMF and 14 received IVC; 15 (62.5%) achieved treatment response (MMF, 7 (70%); IVC, 8/15 (57.1%); p = 0.53, odds ratio (95% confidence interval) 2.0 (0.2, 15.5)). There was a non-statistically significant difference in maintenance of response to MMF (7/8; 87.5%) versus AZA (3/8; 37.5%). Seven patients withdrew (MMF, 2; AZA, 5). During both phases, rates of serious adverse events were similar in both arms. During both phases treatment response with MMF was as effective as the comparator.

Am J Kidney Dis. 2013 Jan;61(1):74-87. doi: 10.1053/j.ajkd.2012.08.041. Epub 2012 Nov 22.

Induction and maintenance treatment of proliferative lupus nephritis: a meta-analysis of randomized controlled trials.

Henderson LK, Masson P, Craig JC, Roberts MA, Flanc RS, Strippoli GF, Webster AC.

Cochrane Renal Group, Centre for Kidney Research, The Children's Hospital at Westmead, Sydney, Australia. lorna.k.henderson@gmail.com

Abstract

BACKGROUND: Lupus nephritis accounts for ~1% of patients starting dialysis therapy. Treatment regimens combining cyclophosphamide with steroids preserve kidney function but have significant side effects. Newer immunosuppressive agents may have improved toxicity profiles.

STUDY DESIGN: Systematic review and random-effects meta-analysis, searching MEDLINE (1966 to April 2012), EMBASE (1988-2011), and the Cochrane Renal Group Specialised Register.

SETTING & POPULATION: Patients with biopsy-proven proliferative lupus nephritis (classes III, IV, V+III, and V+IV).

SELECTION CRITERIA: Randomized controlled trials.

INTERVENTION: Immunosuppressive treatment regimens used for induction and maintenance therapy of lupus nephritis.

OUTCOMES: Mortality, renal remission and relapse, doubling of creatinine level, proteinuria, incidence of end-stage kidney disease, ovarian failure, alopecia, leukopenia, infections, diarrhea, vomiting, malignancy, and bladder toxicity.

RESULTS: 45 trials (2,559 participants) of induction therapy and 6 (514 participants) of maintenance therapy were included. In induction regimens comparing mycophenolate mofetil (MMF) with intravenous cyclophosphamide, there was no significant difference in mortality (7 studies, 710 patients; risk ratio [RR], 1.02; 95% CI, 0.52-1.98), incidence of end-stage kidney disease (3 studies, 231 patients; RR, 0.71; 95% CI, 0.27-1.84), complete renal remission (6 studies, 686 patients; RR, 1.39; 95% CI, 0.99-1.95), and renal relapse (1 study, 140 patients; RR, 0.97; 95% CI, 0.39-2.44). MMF-treated patients had significantly lower risks of ovarian failure (2 studies, 498 patients; RR, 0.15; 95% CI, 0.03-0.80) and alopecia (2 studies, 522 patients; RR, 0.22; 95% CI, 0.06-0.86). In maintenance therapy comparing azathioprine with MMF, the risk of renal relapse was significantly higher (3 studies, 371 patients; RR, 1.83; 95% CI, 1.24-2.71).

LIMITATIONS: Heterogeneity in interventions and definitions of remission and lack of long-term outcome reporting.

CONCLUSIONS: MMF is as effective as cyclophosphamide in achieving remission in lupus nephritis, but is safer, with a lower risk of ovarian failure. MMF is more effective than azathioprine in maintenance therapy for preventing relapse, with no difference in clinically important side effects.

Table 2 (Cont'd). Risk-of-Bias Summary

	Selection Bias		Performance and Detection Biases		Attrition Bias		
	Random Sequence Generation	Allocation Concealment	Blinding, Subjective Outcomes	Blinding, Objective Outcomes	Incomplete Outcome Data	Selective Reporting	Other Bias
Maintenance Trials							
ALMS[59] (2009)	●	●	●	●	●	●	?
Boletis[61,62] (1999)	?	●	●	●	●	●	●
Contreras[18] (2005)	●	●	●	●	●	●	?
Cyclofa-lune[63] (2010)	●	●	●	●	●	●	●
Fu[60] (1998)	●	●	●	●	●	○	●
MAINTAIN[14] (2009)	●	?	●	●	●	●	●
Moroni[64,65] (2004)	●	●	●	●	●	●	?

Note: Review of authors' judgments about each risk of bias item for each included study.
Abbreviations: ●, good quality (low risk of bias); ?, unclear quality (unclear risk of bias); ○, less good quality (high risk of bias); ALMS, Aspreva Lupus Management Study; LUNAR, Lupus Nephritis Assessment with Rituximab Study.

Biol Blood Marrow Transplant. 2012 Oct;18(10):1471-8. doi: 10.1016/j.bbmt.2012.06.003. Epub 2012 Jun 13.

Transplantation for autoimmune diseases in north and South America: a report of the Center for International Blood and Marrow Transplant Research.

Pasquini MC, Voltarelli J, Atkins HL, Hamerschlak N, Zhong X, Ahn KW, Sullivan KM, Carrum G, Andrey J, Bredeson CN, Cairo M, Gale RP, Hahn T, Storek J, Horowitz MM, McSweeney PA, Griffith LM, Muraro PA, Pavletic SZ, Nash RA.

Center for International Blood and Marrow Transplant Research, Medical College of Wisconsin, Milwaukee, WI, USA. mpasquini@mcw.edu

Abstract

Hematopoietic cell transplantation (HCT) is an emerging therapy for patients with severe autoimmune diseases (AID). We report data on 368 patients with AID who underwent HCT in 64 North and South American transplantation centers reported to the Center for International Blood and Marrow Transplant Research between 1996 and 2009. Most of the HCTs involved autologous grafts (n = 339); allogeneic HCT (n = 29) was done mostly in children. The most common indications for HCT were multiple sclerosis, systemic sclerosis, and systemic lupus erythematosus. The median age at transplantation was 38 years for autologous HCT and 25 years for allogeneic HCT. The corresponding times from diagnosis to HCT were 35 months and 24 months. Three-year overall survival after autologous HCT was 86% (95% confidence interval [CI], 81%-91%). Median follow-up of survivors was 31 months (range, 1-144 months). The most common causes of death were AID progression, infections, and organ failure. On multivariate analysis, the risk of death was higher in patients at centers that performed fewer than 5 autologous HCTs (relative risk, 3.5; 95% CI, 1.1-11.1; P = .03) and those that performed 5 to 15 autologous HCTs for AID during the study period (relative risk, 4.2; 95% CI, 1.5-11.7; P = .006) compared with patients at centers that performed more than 15 autologous HCTs for AID during the study period. AID is an emerging indication for HCT in the region. Collaboration of hematologists and other disease specialists with an outcomes database is important to promote optimal patient selection, analysis of the impact of prognostic variables and long-term outcomes, and development of clinical trials.

27 LES.

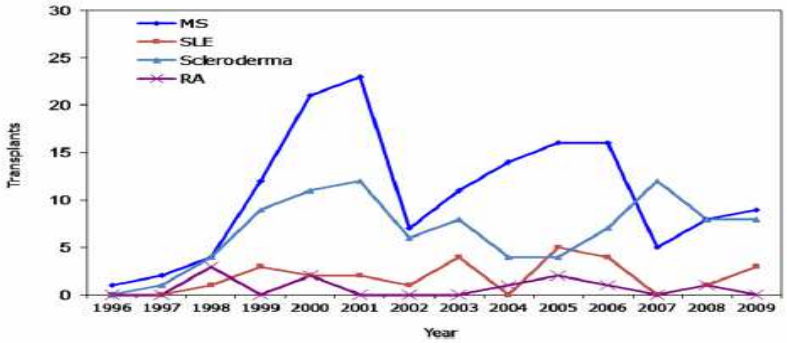


Figure 1. Annual HCTs for AID by indication between 1996 and 2009.

Table 2. Causes of Death after Autologous HCT for AID

Disease	Cause of Death	Number
Evans syndrome (n = 1)	AID	1
Idiopathic thrombocytopenic purpura (n = 2)	AID	1
	Bleeding	1
MS (n = 11)	AID	4
	Bleeding	2
	Infection	1
	Myelodysplasia*	1
	Organ failure	1
	Thrombotic thrombocytopenic purpura	1
	Unknown	1
SSC (n = 16)	AID	4
	Organ failure	4
	Bleeding	2
	Cancer	2
	Infection	2
	Unknown	2
SLE (n = 8)	Infection	6
	AID	1
	Graft failure	1

*Patient developed myelodysplasia after autologous HCT, proceeded to allogeneic HCT, and died from persistent myelodysplasia.

Blood. 2013 Feb 7;121(6):1059-64. doi: 10.1182/blood-2012-07-445965. Epub 2012 Dec 17.

New autoimmune diseases after cord blood transplantation: a retrospective study of EUROCORD and the Autoimmune Disease Working Party of the European Group for Blood and Marrow Transplantation.

Daikeler T, Labopin M, Ruggeri A, Crotta A, Abinun M, Hussein AA, Carlson K, Cornillon J, Diez-Martin JL, Gandemer V, Faraci M, Lindemans C, O'Meara A, Mialou V, Renard M, Sedlacek P, Sirvent A, Socié G, Sora F, Varotto S, Sanz J, Voswinkel J, Vora A, Yesilipek MA, Herr AL, Gluckman E, Farge D, Rocha V.

Eurocord, Hôpital Saint Louis Assistance Publique des Hôpitaux de Paris (AP-HP), University Paris VII, Paris, France. tdaikeler@uhbs.ch

Abstract

To describe the incidence, risk factors, and treatment of autoimmune diseases (ADs) occurring after cord blood transplantation (CBT), we analyzed both CBT recipients reported to EUROCORD who had developed at least 1 new AD and those who had not. Fifty-two of 726 reported patients developed at least 1 AD within 212 days (range, 27-4267) after CBT. Cumulative incidence of ADs after CBT was 5.0% +/- 1% at 1 year and 6.6% +/- 1% at 5 years. Patients developing ADs were younger and had more nonmalignant diseases (P < .001). ADs target hematopoietic (autoimmune hemolytic anemia, n = 20; Evans syndrome, n = 9; autoimmune thrombocytopenia, n = 11; and immune neutropenia, n = 1) and other tissues (thyroiditis, n = 3; psoriasis, n = 2; Graves disease, n 1; membranous glomerulonephritis, n = 2; rheumatoid arthritis, n = 1; ulcerative colitis, n = 1; and systemic lupus erythematosus, n = 1). Four patients developed 2 ADs (3 cases of immune thrombocytopenia followed by autoimmune hemolytic anemia and 1 Evans syndrome with rheumatoid arthritis). By multivariate analysis, the main risk factor for developing an AD was nonmalignant disease as an indication for CBT (P = .0001). Hematologic ADs were most often treated with steroids, rituximab, and cyclosporine. With a median follow-up of 26 months (range, 2-91), 6 of 52 patients died as a consequence of ADs. We conclude that CBT may be followed by potentially life-threatening, mainly hematologic ADs.


Senderos del Sol ©

Otras publicaciones de interés sobre LES en el último año (I)

- LC: embarazos como en controles sanos
- PET puede ser útil en LNPS con RNM normal
- Hemorragia subaracnoidea > frecuente en LES
- Más evidencias de > incidencia de SM en LES
- NL en varones: peor pronóstico/tratamiento
- LES > 25 años y con acs. antiRo (SSA) > SS

Otras publicaciones de interés sobre LES en el último año (II)

- HLADRB1*04/*13 en LES/SAF con enf. vasc.
- Cistatina sérica no recomendable en evaluación renal de los enfermos con LES
- Actividad alta LES: < respuesta vacuna H1N1
- Tacrolimus útil en NL de jóvenes
- Tx MO útil en citopenias refractarias
- Se podrían evitar los CST en la NL??. ARD…

Lupus. 2012 Dec;21(14):1531-7. doi: 10.1177/0961203312459104. Epub 2012 Aug 31.

The efficacy of brain (18)F-fluorodeoxyglucose positron emission tomography in neuropsychiatric lupus patients with normal brain magnetic resonance imaging findings.

Lee SW, Park MC, Lee SK, Park YB.

Department of Internal Medicine, Institute for Immunology and Immunological Disease, Yonsei University College of Medicine, Seoul, Korea.

Abstract

Brain involvement in systemic lupus erythematosus (SLE) is a significant source of morbidity and mortality. Therefore, the early detection and treatment of brain involvement in SLE is of utmost importance; however, a confirmative diagnostic tool for neuropsychiatric SLE is yet to be developed. In this study, we investigated the efficacy of (18)F-FDG-PET for detection of brain involvement in patients with SLE with normal magnetic resonance imaging (MRI) findings. Twenty patients with SLE, who presented with neuropsychiatric symptoms despite normal brain MRI findings and who underwent brain (18)F-FDG-PET, were enrolled. The most common neuropsychiatric manifestation was headache (45%), followed by seizure (20%) and mood disorder (20%). (18)F-FDG-PET revealed significant glucose metabolic abnormalities in 15 of 20 patients (75%). The temporal (55%) and the occipital (55%) lobes were the most susceptible brain regions, followed by the frontal lobe (50%). However, neuropsychiatric symptoms were not geographically correlated to (18)F-FDG-PET findings. Two patients with abnormal (18)F-FDG-PET findings underwent follow-up brain (18)F-FDG-PET after remission, which showed complete resolution of abnormal glucose metabolism. Our data suggest that (18)F-FDG-PET may be an additional diagnostic modality complementary to MRI, when MRI is unable to provide evidence of brain involvement in patients with SLE.

Lupus. 2012 Nov;21(13):1472-81. doi: 10.1177/0961203312458467. Epub 2012 Aug 16.

Clinicopathological characteristics and outcomes of male lupus nephritis in China.

Wang YF, Xu YX, Tan Y, Yu F, Zhao MH.

Renal Division, Department of Medicine, Peking University First Hospital, China. yufengevert@gmail.com

Abstract

OBJECTIVE: The objective of this article is to assess clinicopathological characteristics and outcomes of patients with male lupus nephritis in a cohort of Chinese patients.

METHODS: Clinical, pathological and outcome data of lupus nephritis patients with different gender were retrospectively analyzed and compared.

RESULTS: Among 315 patients with renal biopsy-proven lupus nephritis, 45 were male and 270 were female. The average ages of disease onset of the male and female patients were comparable. The interval between presentation of lupus nephritis and diagnosis was significantly longer in the male group than in female group ($p = 0.003$). Clinical presentation was similar except that males had a significantly lower proportion of alopecia ($p = 0.005$). In laboratory data, male lupus nephritis patients had higher hemoglobin ($p = 0.023$) and higher serum creatinine ($p < 0.001$) than female patients. As for pathological classification and index, no significant difference was found between the two groups. The male patients presented with significantly lower ratios of complete remission and partial remission, and higher ratios of treatment failure and relapse than the female group. Regarding long-term survival and renal outcome, male patients had significantly worse prognosis than females ($p = 0.005$).

CONCLUSIONS: The male lupus nephritis presented with later diagnosis, worse renal function, lower remission rate and higher relapse rate compared with female patients. The male patients had significantly higher mortality and poorer renal outcome.

Bone Marrow Transplant. 2013 Apr;48(4):544-50. doi: 10.1038/bmt.2012.184. Epub 2012 Oct 15.

Mesenchymal SCT ameliorates refractory cytopenia in patients with systemic lupus erythematosus.

Li X, Wang D, Liang J, Zhang H, Sun L.

Department of Immunology and Rheumatology, The Affiliated Drum Tower Hospital of Nanjing University Medical School, Nanjing, China.

Abstract

Our previous data have revealed that proteinuria, antinuclear antibodies and anti-dsDNA antibodies in refractory systemic lupus erythematosus (SLE) reduced after MSC infusion. This study focused on the roles of mesenchymal SCT (MSCT) in SLE patients with refractory cytopenia. Thirty-five SLE patients with refractory cytopenia were enrolled in a MSCT trial. Hematological changes of pre- and post-transplantation were evaluated. Mechanisms for MSCT effects focused on the analysis of percentage of regulatory T cells (Treg) and Th17. The results showed that in 35 SLE patients, 20 patients had leukopenia, 24 with anemia or thrombocytopenia. The average follow-up period after MSCT was 21 months (range 6-45 months). Significant improvements in blood cell count were found after MSCT for most patients, in parallel with the decline of disease activity. Clinical remission was accompanied by increased Treg and decreased Th17. Two patients died of uncontrolled disease recurrence after infection, whereas no adverse events related to transplantation was observed. The result suggested that MSCT could reverse hematological aberration in SLE patients with refractory cytopenia, which might be associated with reconstitution of Treg and Th17. Longer follow-up and clinical larger-scale controlled study, as well as the exact mechanism exploration, will need further investigations.

Arthritis Care Res (Hoboken). 2013 Apr;65(4):601-6. doi: 10.1002/acr.21846.

Increased risk of subarachnoid hemorrhage in patients with systemic lupus erythematosus: a nationwide population-based study.

Chang YS, Liu CJ, Chen WS, Lai CC, Wang SH, Chen TJ, Tzeng CH, Tsai CY, Wang SJ.

Shuang Ho Hospital, Taipei Medical University, New Taipei City, and National Yang-Ming University, Taipei, Taiwan.

Abstract

OBJECTIVE: A relatively common occurrence of spontaneous subarachnoid hemorrhage (SAH) in patients with systemic lupus erythematosus (SLE) has been noted; however, the subsequent studies were conflicting. This nationwide population-based study aimed to evaluate the risk of SAH in patients with SLE.

METHODS: We identified 16,967 SLE patients from the Taiwan National Health Insurance (NHI) database between 2000 and 2006, and compared the incidence rate of SAH with 16,967 randomly selected age- and sex-matched non-SLE subjects. A Cox multivariable proportional hazards model was used to evaluate the risk factors of SAH in the SLE cohort.

RESULTS: The SLE cohort had a higher risk of SAH, with an incidence rate ratio of 4.84 ($P < 0.001$). Despite a younger age, the mortality rate after SAH was significantly higher in the SLE cohort compared to all of the non-SLE SAH patients identified from the 1 million NHI beneficiaries (60.0% versus 38.9%; $P = 0.007$). Age (hazard ratio [HR] 1.03, 95% confidence interval [95% CI] 1.01-1.05), platelet transfusion (HR 2.75, 95% CI 1.46-5.17), red blood cell transfusion (HR 7.11, 95% CI 2.81-17.97), and a mean daily steroid dose >10 mg of prednisolone or equivalent (HR 4.36, 95% CI 2.19-8.68) were independent risk factors for the new onset of SAH.

CONCLUSION: This study demonstrated that SAH is a rare but associated complication of SLE with a high mortality rate. Other than age, higher mean daily steroid use and a history of platelet or red blood cell transfusion were associated with the occurrence of SAH in patients with SLE.

Ann Rheum Dis. 2013 Aug;72(8):1308-14. doi: 10.1136/annrheumdis-2012-202106. Epub 2012 Sep 3.

Clinical associations of the metabolic syndrome in systemic lupus erythematosus: data from an international inception cohort.

Parker B, Urowitz MB, Gladman DD, Lunt M, Bae SC, Sanchez-Guerrero J, Romero-Diaz J, Gordon C, Wallace DJ, Clarke AE, Bernatsky S, Ginzler EM, Isenberg DA, Rahman A, Merrill JT, Alarcón GS, Fessler BJ, Fortin PR, Hanly JG, Petri M, Steinsson K, Dooley MA, Manzi S, Khamashta MA, Ramsey-Goldman R, Zoma AA, Sturfelt GK, Nived O, Aranow C, Mackay M, Ramos-Casals M, van Vollenhoven RF, Kalunian KC, Ruiz-Irastorza G, Lim S, Kamen DL, Peschken CA, Inanc M, Bruce IN.

Arthritis Research UK Epidemiology Unit, Institute of Inflammation and Repair, Manchester Academic Health Sciences Centre, The University of Manchester, Manchester, UK.

Abstract

BACKGROUND: The metabolic syndrome (MetS) may contribute to increased cardiovascular risk in systemic lupus erythematosus (SLE). We aimed to examine the association of demographic factors, lupus phenotype and therapy exposure with the presence of MetS.

METHODS: The Systemic Lupus International Collaborating Clinics Registry for Atherosclerosis inception cohort enrolled recently diagnosed (<15 months) SLE patients from 30 centres across 11 countries from 2000. Clinical, laboratory and therapeutic data were collected according to a standardised protocol. MetS was defined according to the 2009 consensus statement from the International Diabetes Federation. Univariate and backward stepwise multivariate logistic regression were used to assess the relationship of individual variables with MetS.

RESULTS: We studied 1686 patients, of whom 1494 (86.6%) had sufficient data to determine their MetS status. The mean (SD) age at enrolment and disease duration was 35.2 years (13.4) and 24.1 weeks (18.0), respectively. MetS was present at the enrolment visit in 239 (16%). In backward stepwise multivariable regression analysis, higher daily average prednisolone dose (mg) (OR 1.02, 95% CI 1.00 to 1.03), older age (years) (OR 1.04, 95% CI 1.03 to 1.06), Korean (OR 6.33, 95% CI 3.68 to 10.86) and Hispanic (OR 6.2, 95% CI 3.78 to 10.12) ethnicity, current renal disease (OR 1.79, 95% CI 1.14 to 2.80) and immunosuppressant use (OR 1.81, 95% CI 1.18 to 2.78) were associated with MetS.

CONCLUSIONS: Renal lupus, higher corticosteroid doses, Korean and Hispanic ethnicity are associated with MetS in SLE patients. Balancing disease control and minimising corticosteroid exposure should therefore be at the forefront of personalised treatment decisions in SLE patients.

Arthritis Care Res (Hoboken). 2013 Jul;65(7):1121-7. doi: 10.1002/acr.21948.

High disease activity: an independent factor for reduced immunogenicity of the pandemic influenza a vaccine in patients with juvenile systemic lupus erythematosus.

Campos LM, Silva CA, Aikawa NE, Jesus AA, Moraes JC, Miraglia J, Ishida MA, Bueno C, Pereira RM, Bonfa E.

Faculdade de Medicina da Universidade de São Paulo, Sao Paulo, Brazil.

Abstract

OBJECTIVE: Recent findings demonstrated a reduced immunogenicity of the influenza A H1N1/2009 vaccine in juvenile rheumatic diseases. However, a point of concern is whether the vaccine could induce disease flares. The aim of this study was to assess the disease safety of and the possible influence of disease parameters and therapy on nonadjuvant influenza A H1N1 vaccine response of juvenile systemic lupus erythematosus (SLE) patients.

METHODS: One hundred eighteen juvenile SLE patients and 102 healthy controls of a comparable age were vaccinated. Seroprotection rate, seroconversion rate, and factor increase in geometric mean titer (GMT) were calculated and effective immune response was defined by the Food and Drug Administration and the European Committee for Proprietary Medicinal Products vaccine immunologic standards. Disease parameters, treatment, and adverse events were evaluated.

RESULTS: Age was comparable in juvenile SLE patients and controls (mean ± SD 16.0 ± 3.5 versus 15.9 ± 4.5 years; P = 0.26). Three weeks after immunization, seroprotection rate (73.7% versus 95.1%; P < 0.001), seroconversion rate (63.6% versus 91.2%; P < 0.001), GMT (90.8 versus 273.3; P < 0.001), and factor increase in GMT (8.1 versus 19.9; P < 0.001) were significantly lower in juvenile SLE patients versus controls. Nonseroconversion was associated with a higher frequency of patients with a Systemic Lupus Erythematosus Disease Activity Index 2000 (SLEDAI-2K) score ≥8 (48.8% versus 24%; P = 0.008) and a higher mean ± SD current glucocorticoid dosage (18 ± 21.4 versus 10.5 ± 12.5 mg/day; P = 0.018). Multivariate logistic regression including a SLEDAI-2K score ≥8 revealed that only the SLEDAI-2K remained a significant factor for nonseroconversion (odds ratio 0.42, 95% confidence interval 0.18-0.98; P = 0.045). Disease parameters remained stable throughout the study and no severe vaccine adverse events were observed.

CONCLUSION: The present study demonstrated adequate disease safety and is the first to discriminate that high disease activity impairs influenza A H1N1/2009 vaccine antibody production in juvenile SLE, in spite of an overall immune response within recommended levels.

Acta Obstet Gynecol Scand. 2013 Aug;92(8):934-42. doi: 10.1111/aogs.12158. Epub 2013 May 29.

Does cutaneous lupus erythematosus have more favorable pregnancy outcomes than systemic disease? A two-center study.

Hamed HO, Ahmed SR, Alzolibani A, Kamal MM, Mostafa MS, Gamal RM, Atallah DA, Abd-El-Aall DE.

Department of Obstetrics & Gynecology, Qassim University, Buraidah, Saudi Arabia. hossam_omar@yahoo.com

Abstract

OBJECTIVE: To compare pregnancy outcomes in cutaneous lupus erythematosus (CLE) with systemic lupus erythematosus (SLE) and healthy pregnant women.

DESIGN: Cohort comparative study.

SETTING: Two university maternity centers in Saudi Arabia and Egypt.

POPULATION: Pregnant women with CLE and SLE and healthy pregnant women.

METHODS: Over a three-year period, 201 participants were allocated to three groups: group 1 (n = 67) contained women with CLE, group 2 (n = 67) women with SLE, and group 3 healthy controls (n = 67). Diagnosis of lupus erythematosus was based on American College of Rheumatology criteria. All participants were followed until delivery. Lupus exacerbation was evaluated by Lupus Activity Index score. ANOVA and chi-squared tests were used to compare obstetrical and neonatal outcomes, and regression analysis was used to define independent factors of adverse pregnancy outcomes.

MAIN OUTCOME MEASURES: Pregnancy losses, preterm labor, intrauterine growth restriction, preeclampsia, neonatal intensive care unit admissions, cesarean sections and lupus exacerbations.

RESULTS: There was no significant difference between groups 1 and 3 in rates of pregnancy loss, preterm labor, preeclampsia, intrauterine growth restriction and neonatal intensive care admission. Group 1 had lower pregnancy loss ($p = 0.005$), growth restriction ($p = 0.001$), preeclampsia ($p = 0.05$), neonatal intensive care admissions ($p = 0.001$), cesarean section ($p = 0.03$), lupus exacerbations ($p = 0.05$) and anti-phospholipid antibodies ($p = 0.02$) compared with group 2. In groups 1 and 2, lupus exacerbation and anti-phospholipid antibodies were significant independent factors for adverse outcomes.

CONCLUSIONS: Cutaneous lupus erythematosus means comparable pregnancy outcomes to those of the healthy population. Lower rates of disease exacerbation and anti-phospholipid antibodies are potential factors for better pregnancy outcome in CLE compared with SLE.

Rheumatology (Oxford). 2013 Aug;52(8):1438-42. doi: 10.1093/rheumatology/ket141. Epub 2013 Apr 16.

Predicting Sjögren's syndrome in patients with recent-onset SLE.

Hernández-Molina G, Zamora-Legoff T, Romero-Díaz J, Nuñez-Alvarez CA, Cárdenas-Velázquez F, Hernández-Hernández C, Calderillo ML, Marroquín M, Recillas-Gispert C, Ávila-Casado C, Sánchez-Guerrero J.

Department of Immunology and Rheumatology, Instituto Nacional de Ciencias Médicas y Nutrición Salvador Zubirán, Mexico City, Mexico.

Abstract

OBJECTIVE: To determine the prevalence of SS in a cohort of recent-onset SLE patients and evaluate the clinical and immunological variables that may identify SLE patients prone to develop SS.

METHODS: A total of 103 patients participating in a prospective cohort of recent-onset SLE were assessed for fulfilment of the American European Consensus Group criteria for SS using a three-phase approach: screening (European questionnaire, Schirmer -I test and wafer test), confirmation (fluorescein staining test, non-stimulated whole-salivary flow and anti-Ro/La antibodies) and lip biopsy. Anti-Ro/SSA and anti-La/SSB antibodies and RF were measured at entry into the cohort and at SS assessment.

RESULTS: Ninety-three females and 10 males were included. Mean age at lupus diagnosis was 25.9 ± 8.9 years, and lupus duration at SS assessment was 30.9 ± 9.1 years. SS was diagnosed in 19 (18.5%) patients, all female, and the patients were older at SLE diagnosis than patients without SS (30.8 ± 9.3 vs 24 ± 8.8 years, P = 0.004). Anti-Ro/SSA antibody was more common in SLE -SS patients (84% vs 55%, P = 0.02, LR + 1.53, 95% CI 1.14, 2.04). In the multivariate analysis, age ≥25 years and anti-Ro/SSA antibodies at SLE diagnosis were identified as predictors of SLE-SS, while the absence of anti-Ro/SSA, anti-La/SSB and RF seems to be protective (LR- 0.14, 95% CI 0.02, 0.95).

CONCLUSION: The overlap of SLE and SS occurs in almost one-fifth of SLE patients and presents early during its evolution. SLE onset at age ≥25 years plus the presence of anti-Ro/SSA antibody at diagnosis are useful predictors, while the absence of anti-Ro/SSA, anti-La/SSB and RF identifies patients at lowest risk.

Nephron Clin Pract. 2012;121(3-4):c165-73. doi: 10.1159/000346149. Epub 2013 Jan 16.

Long-term tacrolimus-based immunosuppressive treatment for young patients with lupus nephritis: a prospective study in daily clinical practice.

Tanaka H, Watanabe S, Aizawa-Yashiro T, Oki E, Kumagai N, Tsuruga K, Ito E.

Department of Pediatrics, Hirosaki University Hospital, Hirosaki, Japan. hirotana@cc.hirosaki-u.ac.jp

Abstract

BACKGROUND: The optimal long-term treatment for lupus nephritis (LN) in pubertal patients remains to be determined. Tacrolimus (Tac) inhibits T cell activation, and is therefore expected to be effective in patients with LN. However, little has been published about the long-term efficacy and safety of Tac-based immunosuppressive treatment of young patients with LN in daily clinical practice.

METHODS: Nineteen consecutive patients with biopsy-proven LN were recruited for an open-label, prospective, long-term Tac-based treatment regimen. Tac was administered once daily at a dose of 3 mg as induction- or reinduction-maintenance treatment. Four patients (21%) with new-onset LN received mizoribine at a dose of 150 mg once daily in addition to Tac. Treatment outcomes were defined by the European Consensus Lupus Activity Measurement (ECLAM) index, urinary protein/creatinine ratio (Up/cr), serum creatinine and serological lupus markers (complement C3, complement hemolytic activity, CH50, and anti-dsDNA antibody titer). Data on these parameters were collected prospectively. The median follow-up was 42 months.

RESULTS: Baseline characteristics of the patients were as follows: mean age, 18 years; Up/cr, 0.89 ± 1.17; serum C3, 68.1 ± 23.2 mg/dl (normal, 79-152 mg/dl); serum CH50, 26.4 ± 10.5 U/ml (normal, 23-46 U/ml); serum anti-dsDNA antibody titer, 69.3 ± 67.5 IU/ml (normal, <12.0 IU/ml); serum creatinine, 0.55 ± 0.18 mg/dl, and ECLAM index, 4.6 ± 1.9. Despite gradually tapering the dose of concomitantly administered prednisolone, a marked improvement compared with baseline values was observed in all outcome measures as early as 3 months after the initiation of treatment, and the favorable changes persisted throughout the treatment period in most of the patients. Sustained improvements in the outcome measures compared with the baseline values were confirmed after a mean of 42 months of treatment: ECLAM index, 1.1 ± 1.1; serum CH50, 36.0 ± 12.8 U/ml, anti-dsDNA antibody titer, 22.5 ± 26.5 IU/ml (all $p < 0.01$); Up/cr ratio, 0.35 ± 0.58, and serum C3 level, 79.7 ± 17.6 mg/dl (both $p < 0.05$). Serum creatinine level remained within the normal range in all the study participants. Complete response was achieved in 12 patients (63%), and a partial response was achieved in 5 patients (26%). The remaining 2 patients showed no response. No serious adverse effects were observed.

CONCLUSION: The data suggest that long-term, relatively low-dose Tac-based immunosuppressive treatment is beneficial and has low cytotoxicity, and therefore represents an attractive option for the treatment of young patients with LN in daily clinical practice. Further studies involving a larger number of patients are needed to confirm these results.

Ann Rheum Dis. 2013 Jun;72(6):1018-25. doi: 10.1136/annrheumdis-2012-201760. Epub 2012 Aug 14.

HLA-DRB1*04/*13 alleles are associated with vascular disease and antiphospholipid antibodies in systemic lupus erythematosus.

Lundström E, Gustafsson JT, Jönsen A, Leonard D, Zickert A, Elvin K, Sturfelt G, Nordmark G, Bengtsson AA, Sundin U, Källberg H, Sandling JK, Syvänen AC, Klareskog L, Gunnarsson I, Rönnblom L, Padyukov L, Svenungsson E.

Department of Medicine, Rheumatology Unit, Karolinska Institutet/Karolinska University Hospital, Stockholm, Sweden.

Abstract

BACKGROUND AND OBJECTIVES: Vascular disease is common in systemic lupus erythematosus (SLE) and patients with antiphospholipid antibodies (aPL) are at high risk to develop arterial and venous thrombosis. Since HLA class II genotypes have been linked to the presence of pro-thrombotic aPL, we investigated the relationship between HLA-DRB1 alleles, aPL and vascular events in SLE patients.

METHODS: 665 SLE patients of Caucasian origin and 1403 controls were included. Previous manifestations of ischaemic heart disease, ischaemic cerebrovascular disease (ICVD) and venous thromboembolism (together referred to as any vascular events (AVE)) were tabulated. aPL were measured with ELISA. Two-digit HLA-DRB1 typing was performed by sequence-specific primer-PCR.

RESULTS: HLA-DRB1*04 was more frequent among SLE patients with ICVD compared to unaffected patients. This association remained after adjustment for known traditional cardiovascular risk factors. HLA-DRB1*13 was associated with AVE. All measured specificities of aPL-cardiolipin IgG and IgM, β2-glycoprotein-1 IgG, prothrombin (PT) IgG and a positive lupus anticoagulant test were associated with HLA-DRB1*04-while HLA-DRB1*13 was associated with IgG antibodies (β2-glycoprotein-1, cardiolipin and PT). In patients with the combined risk alleles, HLA-DRB1*04/*13, there was a significant additive interaction for the outcomes AVE and ICVD.

CONCLUSIONS: The HLA-DRB1*04 and HLA-DRB1*13 alleles are associated with vascular events and an aPL positive immune-phenotype in SLE. Results demonstrate that a subset of SLE patients is genetically disposed to vascular vulnerability.

Clin Exp Rheumatol. 2013 Mar-Apr;31(2):251-5. Epub 2012 Dec 17.

Serum cystatin C is independently associated with renal impairment and high sensitivity C-reactive protein in systemic lupus erythematosus.

Chew C, Pemberton PW, Husain AA, Haque S, Bruce IN.

The Kellgren Centre for Rheumatology, Central Manchester Foundation Trust, Manchester, UK. c.chew@nhs.net

Abstract

OBJECTIVES: In systemic lupus erythematosus (SLE) patients, glomerular filtration rate (GFR) is usually estimated using the modified Cockcroft-Gault (mCG) and Modification of Diet in Renal Disease (MDRD) equations. We aimed to study cystatin C (sCysC) in SLE to assess its agreement with standard renal indices and investigate factors affecting sCysC in SLE.

METHODS: SLE patients (≥4 ACR criteria) and healthy women from Greater Manchester were recruited and clinical assessments were undertaken. SCysC was measured using R & D Systems' ELISA. Agreement between renal measures was assessed using Deming plots and factors associated with sCysC in SLE were examined by multiple linear regression analyses.

RESULTS: 178 patients and 68 controls had median (IQR) ages of 53 (46-61) and 50 (39-60) years, respectively. In an age-adjusted analysis, SLE patients had higher sCysC (1.16 [0.98-1.36] vs. 0.950 [0.73-1.13] mg/l; p<0.0001) and within SLE those with a history of lupus nephritis had higher sCysC (1.31 [1.10-1.66] vs. 1.11 [0.95-1.29] mg/l; p<0.005). SCysC correlated positively with serum creatinine, and inversely to renal measures (r=-0.530; p<0.0001 [mCG], and r=-0.620; p<0.0001 [MDRD]). There was closer agreement between the two eGFR measures than between either eGFR measures and sCysC. In addition to age and serum creatinine, a multivariate analysis (β, p) found that high-sensitivity C-reactive protein (hs-CRP) (0.03, 0.026) was also independently associated with sCysC in SLE.

CONCLUSIONS: In SLE, sCysC may be influenced by low grade inflammation as well as by renal dysfunction. Therefore, SCysC should not supplant current assessment of renal dysfunction in SLE.

Clin Biochem. 2013 Mar;46(4-5):317-20. doi: 10.1016/j.clinbiochem.2012.12.004. Epub 2012 Dec 12.

Comparison of three anti-dsDNA assays: performance and correlation with systemic lupus erythematosus disease activity.

Venner AA, Ibañez D, Gladman DD, Urowitz MB, MacKinnon A, Blasutig IM, Yip PM.

Department of Clinical Biochemistry, University Health Network, Toronto, Ontario, Canada.

Abstract

OBJECTIVE: To investigate the BioPlex 2200 multiplex immunoassay and Farrzyme ELISA assays as alternatives to the established Farr radioimmunoassay for the correlation of anti-dsDNA antibodies in the assessment of disease activity in systemic lupus erythematosus (SLE).

DESIGN AND METHODS: Standard protocols were used to verify analytical performance claims. Anti-dsDNA antibody levels in SLE patient specimens (N=105) were measured and assessed for clinical performance using manufacturer cut-off limits along with the Systemic Lupus Erythematosus Disease Activity Index 2000 (SLEDAI-2K) score.

RESULTS: Assay precision, measurable range and normal reference interval met the manufacturers' stated claims. Agreement between Farr and BioPlex assays was moderate (positive agreement=62%; negative agreement=85%; kappa=0.48), as was agreement between Farr and Farrzyme assays (positive agreement=56%; negative agreement=91%; kappa=0.51). Mean SLEDAI-2K scores differed significantly between the anti-dsDNA positive and negative groups for BioPlex (p=0.0006), but not Farr (p=0.11) or Farrzyme (p=0.34). ROC curve analysis showed a similar area under the curve (AUC) for all three assays (0.76, 0.74, and 0.73 for Farr, BioPlex, and Farrzyme, respectively) in the discrimination of clinically active disease. Furthermore, increased anti-dsDNA levels from BioPlex showed significant correlation with active renal disease. However, results suggested a lower cut-off for the Farrzyme assay for assessment of global disease activity.

CONCLUSIONS: BioPlex and Farrzyme assays had similar overall agreement with the Farr assay, with BioPlex best reflecting disease activity in SLE patients.

Arthritis Rheum. 2012 Nov;64(11):3677-86. doi: 10.1002/art.34651.

Comparison of autoantibody specificities between traditional and bead-based assays in a large, diverse collection of patients with systemic lupus erythematosus and family members.

Bruner BF, Guthridge JM, Lu R, Vidal G, Kelly JA, Robertson JM, Kamen DL, Gilkeson GS, Neas BR, Reichlin M, Scofield RH, Harley JB, James JA.

Oklahoma Medical Research Foundation, Oklahoma City, USA.

Abstract

OBJECTIVE: Replacement of standard immunofluorescence methods with bead-based assays for antinuclear antibody (ANA) testing is a new clinical option. The aim of this study was to evaluate a large, multiethnic cohort of patients with systemic lupus erythematosus (SLE), blood relatives, and unaffected control individuals for familial aggregation and subset clustering of autoantibodies by high-throughput serum screening technology and traditional methods.

METHODS: Serum samples (1,540 SLE patients, 1,154 unaffected relatives, and 906 healthy, population-based controls) were analyzed for SLE autoantibodies using a bead-based assay, indirect immunofluorescence (IIF), and immunodiffusion. Autoantibody prevalence, sensitivity for disease detection, clustering of autoantibodies, and associations between newer methods and standard immunodiffusion results were evaluated.

RESULTS: The frequencies of ANAs in the sera from African American, Hispanic, and European American patients with SLE were 89%, 73%, and 67%, respectively, by BioPlex 2200 bead-based assay and 94%, 84%, and 86%, respectively, by IIF. When comparing the serum prevalence of 60-kd Ro, La, Sm, nuclear RNP A, and ribosomal P autoantibodies across assays, the sensitivity of detection ranged from 0.92 to 0.83 and the specificity ranged from 0.90 to 0.79. Autoantibody cluster analysis showed associations of autoantibody specificities in 3 subsets: 1) 60 kd Ro, 52-kd Ro, and La, 2) spliceosomal proteins, and 3) double-stranded DNA (dsDNA), chromatin, and ribosomal P. Familial aggregation of Sm/RNP, ribosomal P, and 60-kd Ro in SLE patient sibling pairs was observed ($P \leq 0.004$). Simplex-pedigree SLE patients had a greater prevalence of dsDNA ($P = 0.0003$) and chromatin ($P = 0.005$) autoantibodies compared to patients with a multiplex SLE pedigree.

CONCLUSION: The frequencies of ANAs detected by a bead-based assay are lower than those detected by IIF in European American patients with SLE. These assays have strong positive predictive values across ethnic groups, provide useful information for clinical care, and provide unique insights into familial aggregation and autoantibody clustering.

Rheumatology (Oxford). 2013 Mar;52(3):501-9. doi: 10.1093/rheumatology/kes252. Epub 2012 Nov 18.

Clinical manifestations and anti-phospholipid antibodies in 712 patients with systemic lupus erythematosus: evaluation of two diagnostic assays.

Vikerfors A, Johansson AB, Gustafsson JT, Jönsen A, Leonard D, Zickert A, Nordmark G, Sturfelt G, Bengtsson A, Rönnblom L, Gunnarsson I, Elvin K, Svenungsson E.

Unit of Rheumatology, Department of Medicine Solna, Karolinska Institutet, Karolinska University Hospital,Stockholm, Sweden.
anna.vikerfors@karolinska.se

Abstract

OBJECTIVES: To evaluate the agreement and performance of two tests for aPLs with regard to association with manifestations of the APS in patients with SLE.

METHODS: We investigated 712 SLE patients and 280 population controls. Cardiolipin and β(2) glycoprotein-I antibodies were measured with routine ELISA and a new automated method. Three positivity cut-offs (99%, 90% of controls and recommended cut-off by manufacturers) were used. Associations with previous thrombotic events, thrombocytopenia and, in a subgroup of patients, obstetric morbidity (n = 296) were evaluated. Results were compared with the LA test, performed in 380 patients.

RESULTS: Inter-test agreement was moderate (demonstrated by κ-values 0.16-0.71). Performance of the two tests was similar: at the 99th percentile cut-off, sensitivity for any thrombotic event ranged from 3.7% to 24.8%, while specificity was 84.7-97.7%. Regardless of assay, IgG isotypes were associated with venous thrombosis and ischaemic cerebrovascular disease, whereas aPLs of IgM isotype were weakly associated with ischaemic heart disease. Associations were greatly affected by aPL level. LA performed better than the specific aPL tests. LA was associated with any thrombotic event, odds ratio 5.4 (95% CI 3.1, 9.4), while the specific aPL tests ranged from non-significant to an odds ratio of 1.9 (95% CI 1.03, 3.4) using criteria cut-off. LA was also convincingly associated with other APS manifestations.

CONCLUSION: In relation to thrombotic manifestations, there was moderate agreement but no clear advantages when comparing a routine aPL ELISA with an automated method. APL isotype and titre as well as LA positivity are important for risk assessment in SLE patients.

Autoimmun Rev. 2013 Jan;12(3):444-54. doi: 10.1016/j.autrev.2012.08.019. Epub 2012 Sep 18.

Cutaneous lupus erythematosus: first multicenter database analysis of 1002 patients from the European Society of Cutaneous Lupus Erythematosus (EUSCLE).

Biazar C, Sigges J, Patsinakidis N, Ruland V, Amler S, Bonsmann G, Kuhn A; EUSCLE co-authors.

Department of Dermatology, University of Muenster, 48149 Muenster, Germany.

Abstract

In this prospective, cross-sectional, multicenter study, we assessed clinical and laboratory characteristics from patients with cutaneous lupus erythematosus (CLE) using the Core Set Questionnaire of the European Society of Cutaneous Lupus Erythematosus (EUSCLE). 1002 (768 females, 234 males) patients with different subtypes of CLE, such as acute CLE (ACLE, 304 patients), subacute CLE (SCLE, 236 patients), chronic CLE (CCLE, 397 patients), and intermittent CLE (ICLE, 65 patients), from 13 European countries were collected and statistically analyzed by an SPSS database. The main outcome measures included gender, age at onset of disease, LE-specific and LE-nonspecific skin lesions, photosensitivity, laboratory features, and the criteria of the American College of Rheumatology (ACR) for the classification of systemic lupus erythematosus. The mean age at onset of disease was 43.0±15.7 years and differed significantly between the CLE subtypes. In 347 (34.6%) of the 1002 patients, two or more CLE subtypes were diagnosed during the course of the disease and 453 (45.2%) presented with LE-nonspecific manifestations. Drug-induced CLE and Sjögren's Syndrome had the highest prevalence in SCLE patients (13.1% and 14.0%, respectively). Photosensitivity was significantly more frequent in patients with ACLE, SCLE, and ICLE compared with those with CCLE. The detection of antinuclear antibodies such as anti-Ro/SSA and anti-La/SSB antibodies revealed further significant differences between the CLE subtypes. In summary, the EUSCLE Core Set Questionnaire and its database facilitate the analysis of clinical and laboratory features in a high number of patients with CLE and will contribute to standardized assessment and monitoring of the disease in Europe.

Am J Ophthalmol. 2013 Mar;155(3):418-428.e1. doi: 10.1016/j.ajo.2012.09.025. Epub 2012 Dec 4.

Impact of the revised american academy of ophthalmology guidelines regarding hydroxychloroquine screening on actual practice.

Browning DJ.

Charlotte Eye, Ear, Nose, and Throat Associates, Charlotte, NC 28210, USA. dbrowning@ceenta.com

Abstract

PURPOSE: To determine the impact of the revised academy guidelines on screening for hydroxychloroquine retinopathy.

DESIGN: Retrospective, observational cohort study.

METHODS: setting: Private practice of 29 doctors. study population: Total of 183 patients for follow-up and 36 patients for baseline screening. observation procedure: Review of charts, 10-2 visual fields (VFs), multifocal electroretinograms (mfERG), and spectral-domain optical coherence tomography (SD-OCT) images before and after the revised guidelines. main outcome measure: Rates of use of ancillary tests and clinical intervention, costs of screening, follow-up schedules, and comparative sensitivity of tests.

RESULTS: New hydroxychloroquine toxicity was found in 2 of 183 returning patients (1.1%). Dosing above 6.5 mg/kg/d was found in 28 of 219 patients (12.8%), an underestimate because patient height, weight, and daily dose were not determined in 77 (35.1%), 84 (38.4%), and 59 (26.9%), respectively. In 10 of the 28 (35.7%), the dose was reduced, in 2 (7.1%) hydroxychloroquine was stopped, but in 16 (57.1%) no action was taken. The cost of screening rose 40%/patient after the revised guidelines. Fundus autofluorescence imaging was not used. No toxicity was detected by adding mfERG or SD-OCT. In no case was a 5-year period free of follow-up recommended after baseline screening in a low-risk patient.

CONCLUSIONS: Detection of toxic daily dosing is a cost-effective way to reduce hydroxychloroquine toxicity, but height, weight, and daily dose were commonly not checked. The revised guidelines, emphasizing mfERG, SD-OCT, or FAF, raised screening cost without improving case detection. The recommended 5-year screening-free interval for low-risk patients after baseline examination was ignored.

Ann Rheum Dis. 2013 Aug;72(8):1280-6. doi: 10.1136/annrheumdis-2012-202844. Epub 2013 Jun 5.

Prospective observational single-centre cohort study to evaluate the effectiveness of treating lupus nephritis with rituximab and mycophenolate mofetil but no oral steroids.

Condon MB, Ashby D, Pepper RJ, Cook HT, Levy JB, Griffith M, Cairns TD, Lightstone L.

Imperial College NHS Healthcare Trust Lupus Centre, Hammersmith Hospital, London, UK.

Abstract

OBJECTIVES: Lupus nephritis (LN) is a serious complication of systemic lupus erythematosus (SLE). All current treatment regimens include oral steroids, which are associated with severe adverse events and long-term damage. We have piloted a steroi avoiding protocol (rituxilup) for the treatment of biopsy-proven active International Society of Nephrology/Renal Pathology Society (ISN/RPS) class III, IV, or class V LN.

METHODS: We report the findings from the first 50 consecutive patients, treated with 2 doses of rituximab (1 g) and methyl prednisolone (500 mg) on days 1 and 15, and maintenance treatment of mycophenolate mofetil. Patients on maintenance steroids or with life-threatening SLE or requiring dialysis were excluded. Renal remission was defined as serum creatinine no greater than 15% above baseline; complete biochemical remission (CR) was defined as urine protein : creatinine ratio (PCR)<50 mg/mmol or partial remission (PR) if PCR>50 mg/mmol but non-nephrotic and >50% reduction.

RESULTS: A total of 45 (90%) patients achieved CR or PR by a median time of 37 weeks (range 4-200). Overall, 72% (n=36) achieved CR (median time 36 weeks (11-58)) and a further 18% (n=9) achieved persistent PR (median time 32 weeks (19-58)). By 52 weeks, CR and PR had been achieved in 52% (n=26) and 34% (n=17) respectively. In all, 12 relapses occurred in 11 patients, a a median time of 65.1 weeks (20-112) from remission. A total of 6/50 patients had systemic flares. Of the 45 responders, only 2 required >2 weeks of oral steroids. Adverse events were infrequent; 18% were admitted, 10% for an infective episode.

CONCLUSIONS: The rituxilup cohort demonstrates that oral steroids can be safely avoided in the treatment of LN. If findings are confirmed, it could mark a step change in the approach to the treatment of LN.