JORNADA
Actualización en LUPUS
ALICANTE 13 y 14 DICIEMBRE
2019

LES & Vasculitis cutánea

Francisco Ortiz Sanjuán

Alicante, 13 Diciembre 2019

Vasculitis cutánea & LES

Vasculitis cutáneas

Vasculitis primarias:
Vasculitis de pequeño vaso:
Vasculitis de hipersensibilidad
Púrpura de Schöenlein-Henoch (vascultis IgA)
Vasculitis urticariforme
Crioglobulinemia mixta esencial
Vasculitis de pequeño-mediano vaso:
Poliangeítis microscópica
Granulomatosis de Wegener (Granulomatosis con poliangeítis)
Síndrome de Churg-Strauss(Granulomatosis eosinofílica con poliangeítis)
Vasculitis secundarias:
Conectivopatías y otras enfermedades reumatológicas y autoinmunes
Neoplasias
Infecciones mayores
Fármacos

Blanco R et al. Medicine. 1998

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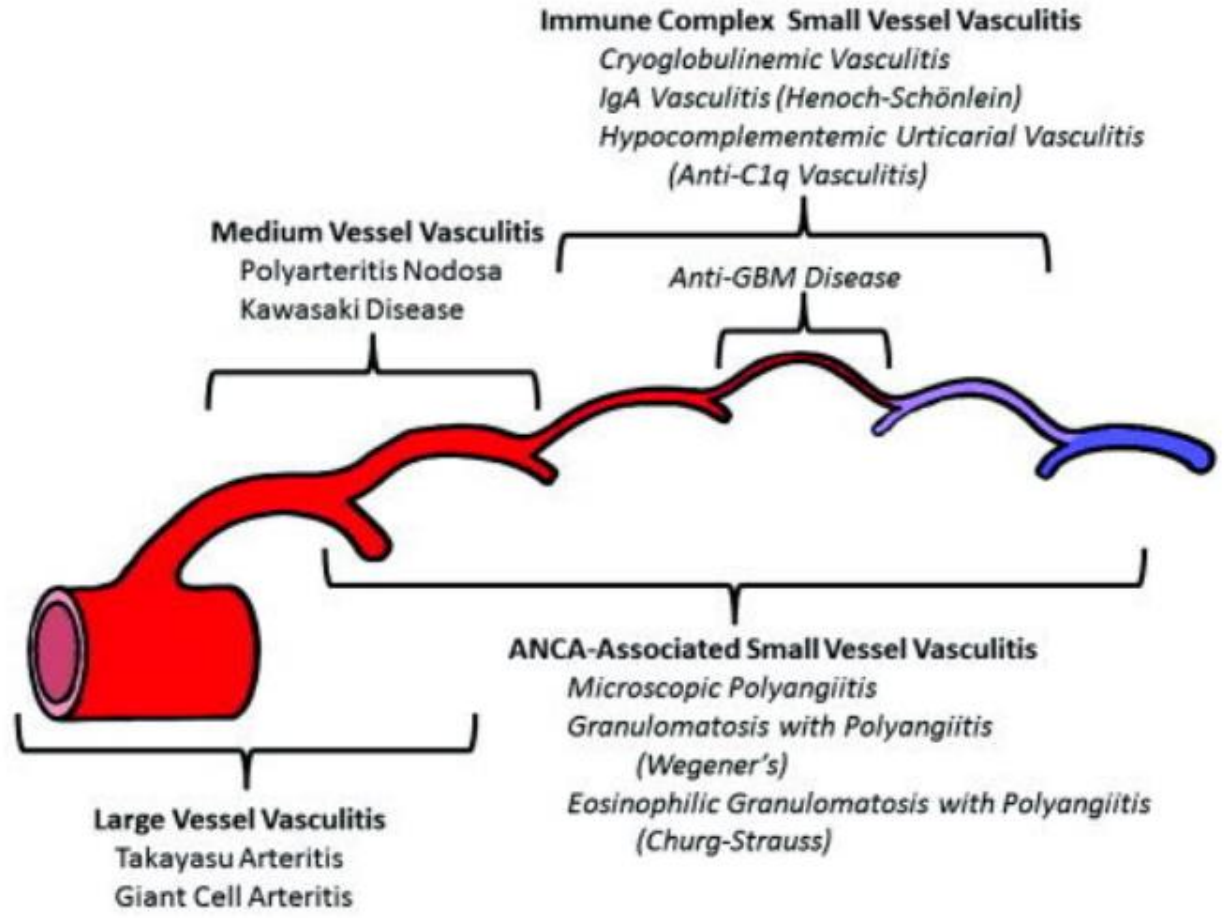
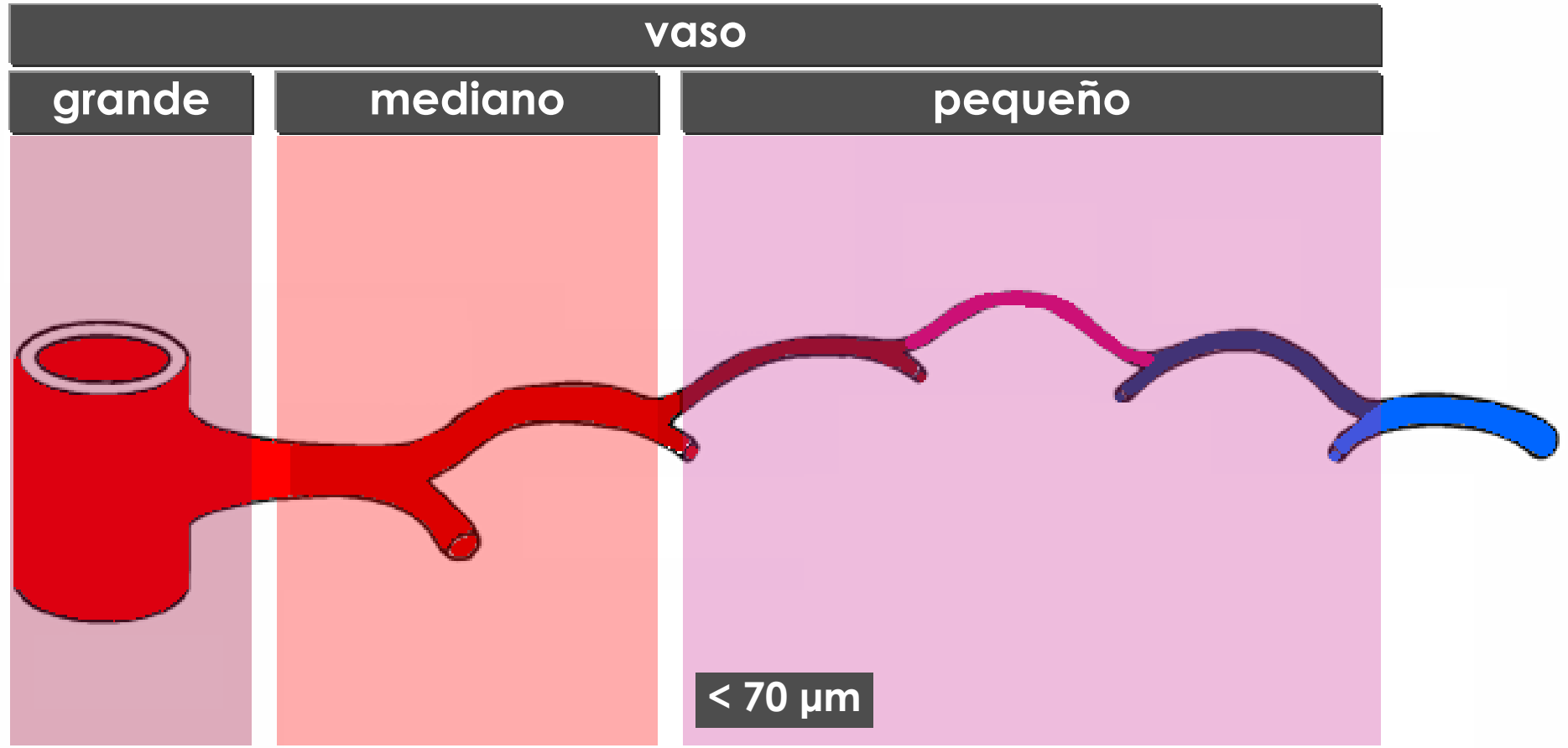
Vasculitis cutánea & LES



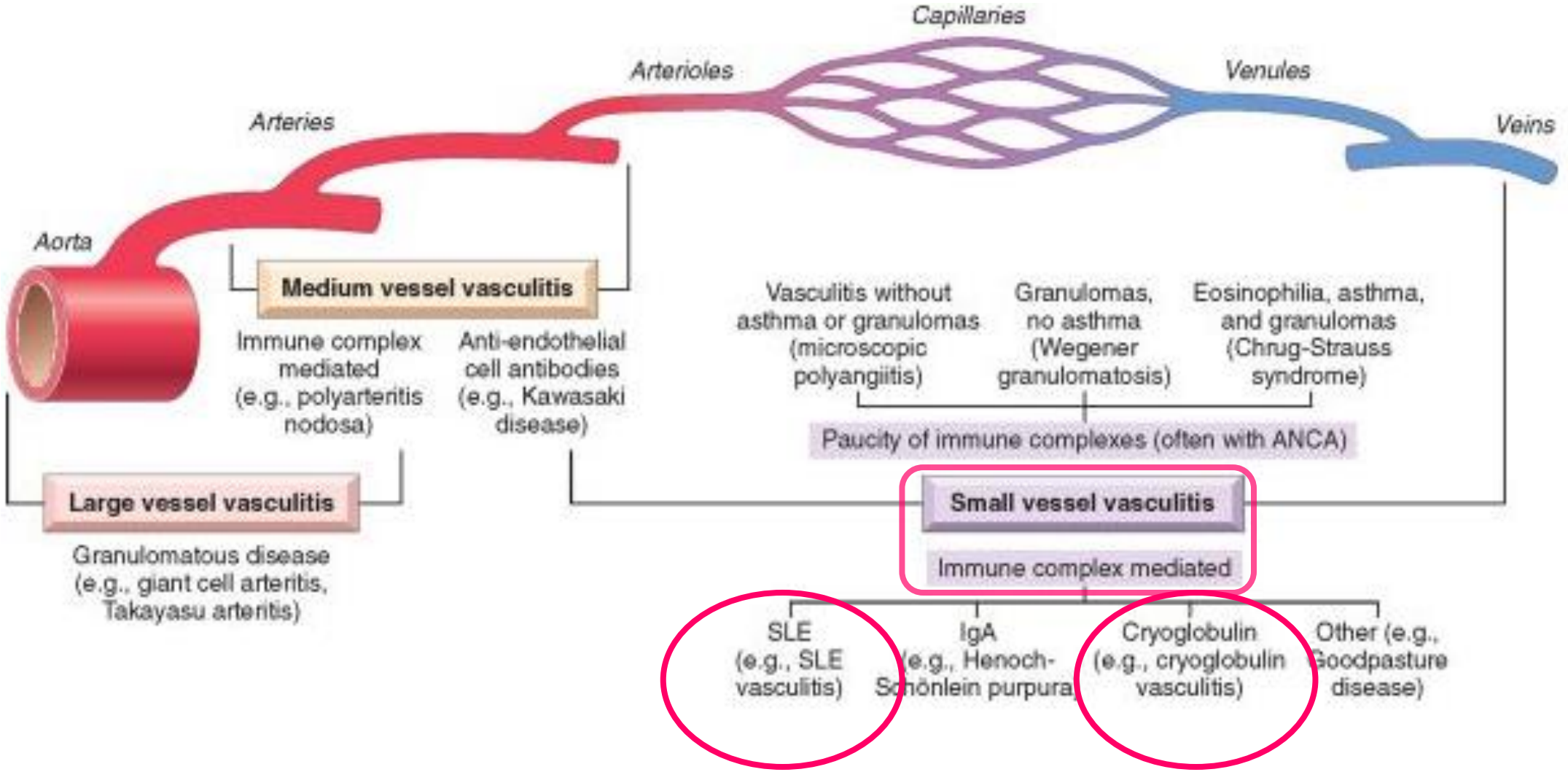
Jennette JC. et al. Arthritis Rheum. 2013 Jan;65(1):1-11. doi: 10.1002/art.37715.

Ultraestructura de la circulación cutánea

Tamaño vaso



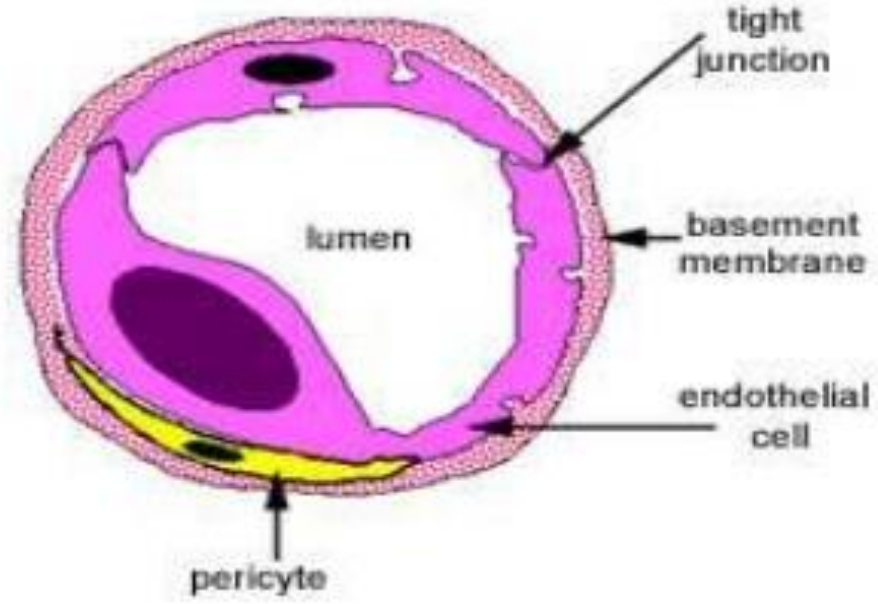
Vasculitis cutánea & LES



Adapted from Jennette. Curr Opin Rheumatol. 2007 Jan;19(1):10-6.

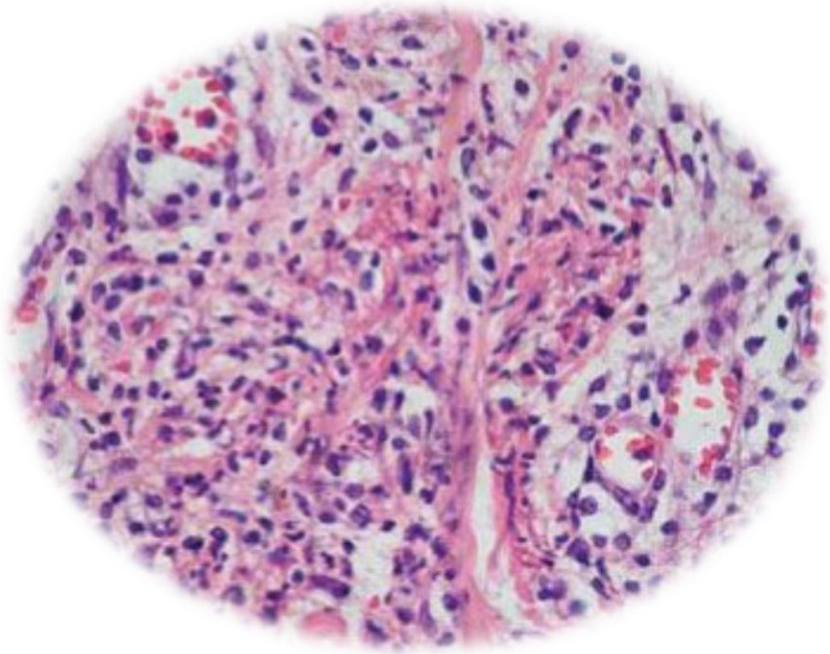
Segmento microvascular

- Las arteriolas de la dermis superficial no poseen lámina elástica externa.
- El segmento ascendente del "loop" capilar presenta una única capa de células endoteliales rodeada de una capa discontinua de pericitos
- Este segmento arteriolar precapilar desempeña una importante función vasomotora



Anatomía patológica

- Lesiones cutáneas → **Vasculitis leucocitoclástica:**
  - - Inflamación vasos pequeño calibre
    - Plexo superficial piel unión dermo-epidérmica
      - Edema endothelial
      - Extravasación de hematíes
      - Leucocitoclasia
      - Necrosis fibrinoide



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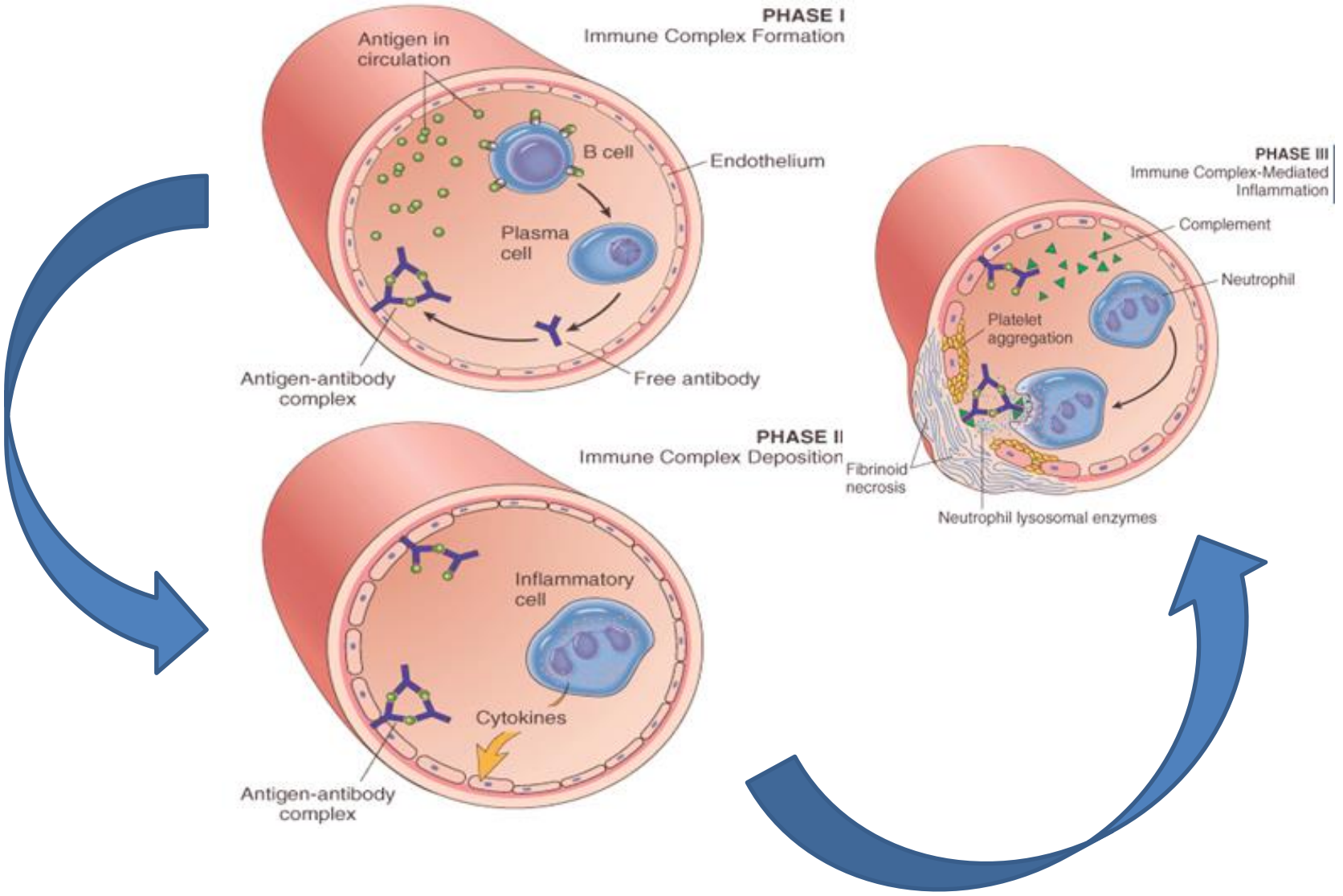
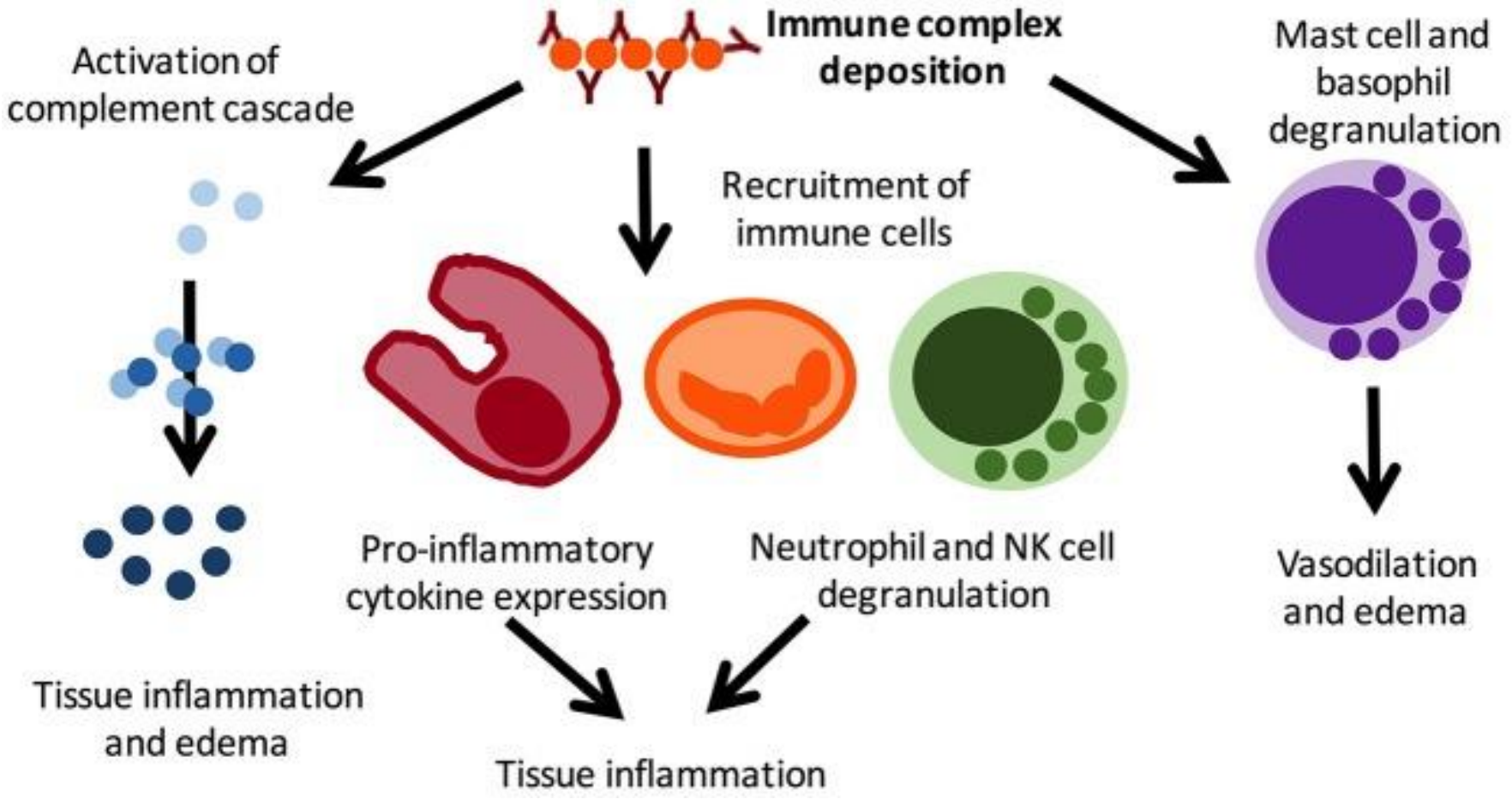


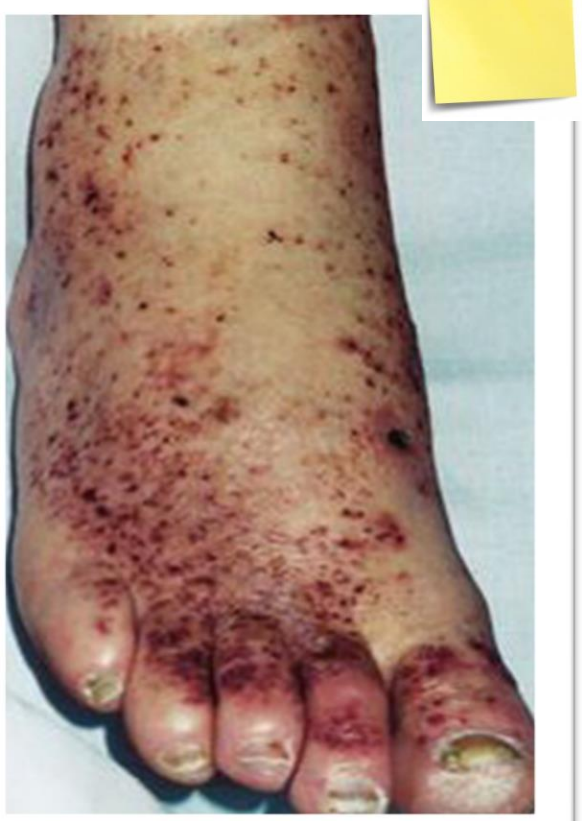
Elsevier. Kumar et al: Robbins Basic pathology 8e.

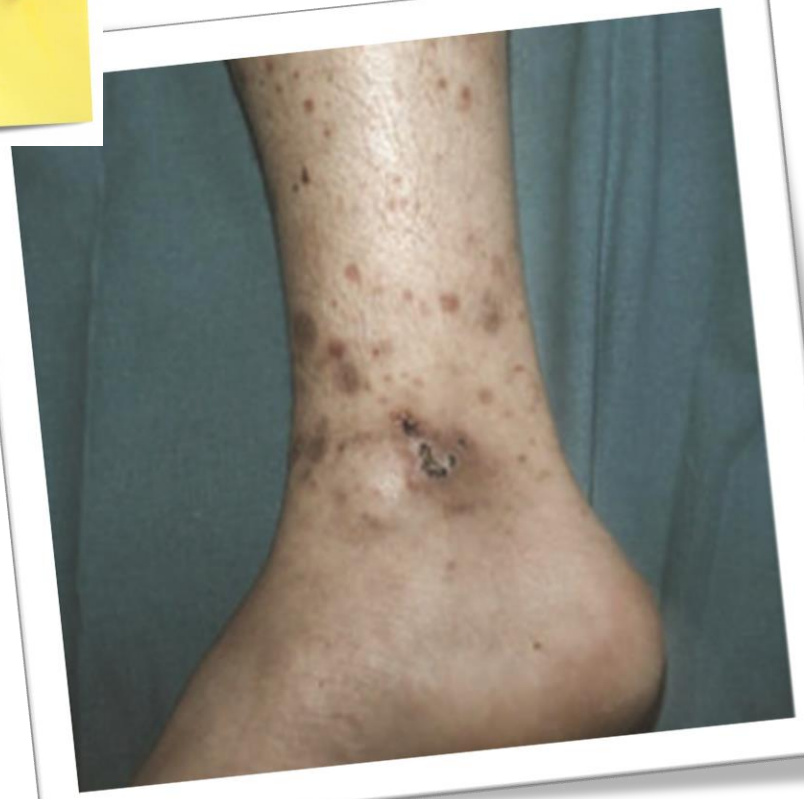
Vasculitis cutánea & LES

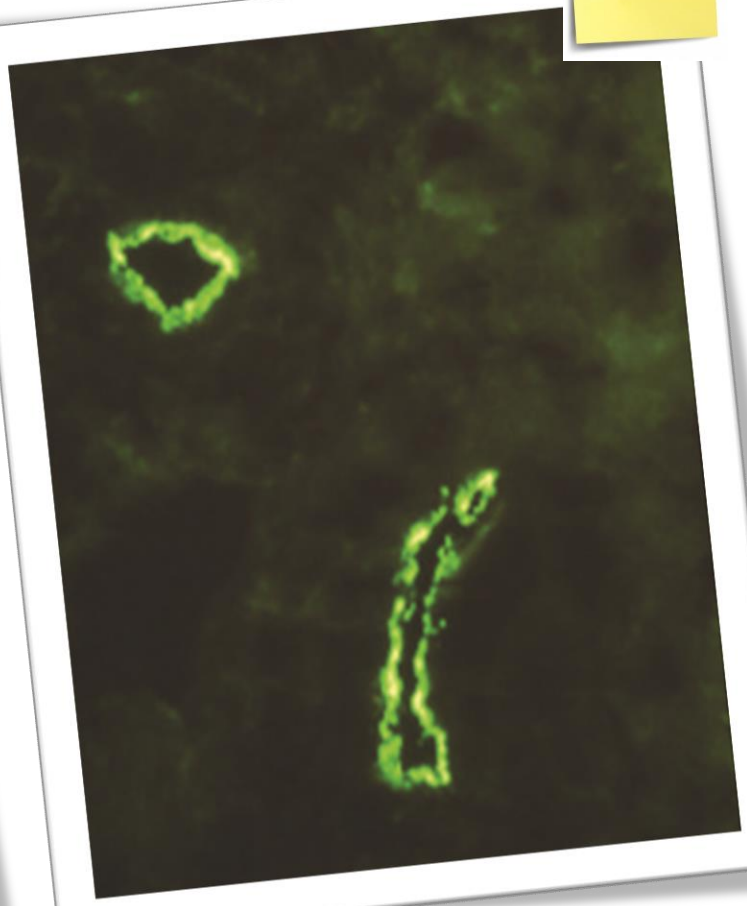


Smith et al. Front Pediatr. 2019 May 9;7:149. doi: 10.3389/fped.2019.00149. eCollection 2019.

Vasculitis cutánea & LES







Uva et al. Autoimmune Diseases Volume 2012; doi:10.1155/2012/834291

Vasculitis cutánea & LES

- Vasculitis no es una manifestación común en el LES (10-12%)
- Amplio espectro: Formas Leves / Formas severas
- Vasculitis cutánea es la forma más frecuente de vasculitis en LES (≈30%)
- Vasculitis por depósito de inmunocomplejos / Activación del complemento

- Púrpura palpable, urticaria, úlceras, pápulas, placas o macules eritematosas, eritema nodular, lívedo racemosa, gangrena digital

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Vasculitis cutánea & LES

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2019

76 VC & LES

Vasculitis in Systemic Lupus Erythematosus

Prevalence and Clinical Characteristics in 670 Patients

Manuel Ramos-Casals, MD, PhD, Norma Nardi, MD, Mariana Lagrutta, MD, Pilar Brito-Zerón, MD, Albert Bové, MD, PhD, German Delgado, MD, Ricard Cervera, MD, PhD, Miguel Ingelmo, MD, PhD, and Josep Font, MD, PhD

Abstract: We conducted the current study to determine the prevalence and clinical characteristics of vasculitis in a large series of patients with systemic lupus erythematosus (SLE), focusing on the classification and clinical significance of the different types of vasculitis. We studied 670 consecutive patients who fulfilled 4 or more of the 1997 revised criteria for SLE. Definite vasculitis was diagnosed histologically and/or by arteriography, and probable vasculitis was diagnosed clinically when there were characteristic cutaneous lesions. Vasculitides were categorized according to the definitions adopted by the Chapel Hill Consensus Conference. Seventy-six (11%) patients with SLE had vasculitis (68 female patients and 8 male; mean age, 37.8 yr); only 32 (42%) fulfilled the Chapel Hill definitions. Cutaneous lesions were the main clinical presentation of vasculitis, present in 68 (89%) patients, while the remaining 8 (11%) had isolated visceral vasculitis. Compared with SLE patients without vasculitis, patients with vasculitis had a higher prevalence of livedo reticularis (22% vs. 3%; p = 0.028); a higher mean European Consensus Lupus Activity Measurement (ECLAM) score (5.86 vs. 3.87; p < 0.001); and a higher frequency of anemia (62% vs. 17%; p < 0.001), erythrocyte sedimentation rate (ESR) >50 mm/h (60% vs. 15%; p < 0.001), and anti-La/SS-B antibodies (19% vs. 5%; p = 0.014) in the multivariate analysis. With respect vasculitis in our patients with SLE was associated with a higher ECLAM score, livedo reticularis, hematologic parameters (anemia, high ESR), and anti-La/SS-B antibodies.

(*Medicine* 2006;85:95–104)

Abbreviations: ACR = American College of Rheumatology, ANA = antinuclear antibodies, APS = antiphospholipid syndrome, aPL = antiphospholipid antibodies, ECLAM = European Consensus Lupus Activity Measurement score, ESR = erythrocyte sedimentation rate, HCV = hepatitis C virus, MVV = medium-sized vessel vasculitis, PAN = polyarteritis nodosa, SLE = systemic lupus erythematosus, SVV = small vessel vasculitis.

INTRODUCTION

Systemic lupus erythematosus (SLE) is considered the most clinically and serologically diverse autoimmune disease because it may affect any organ and display a broad spectrum of clinical manifestations[41,45]. In addition, SLE is defined by the almost invariable presence in the blood of antibodies directed against 1 or more cell components.

Ramos-Casals et al. Medicine 2006;85:95–104

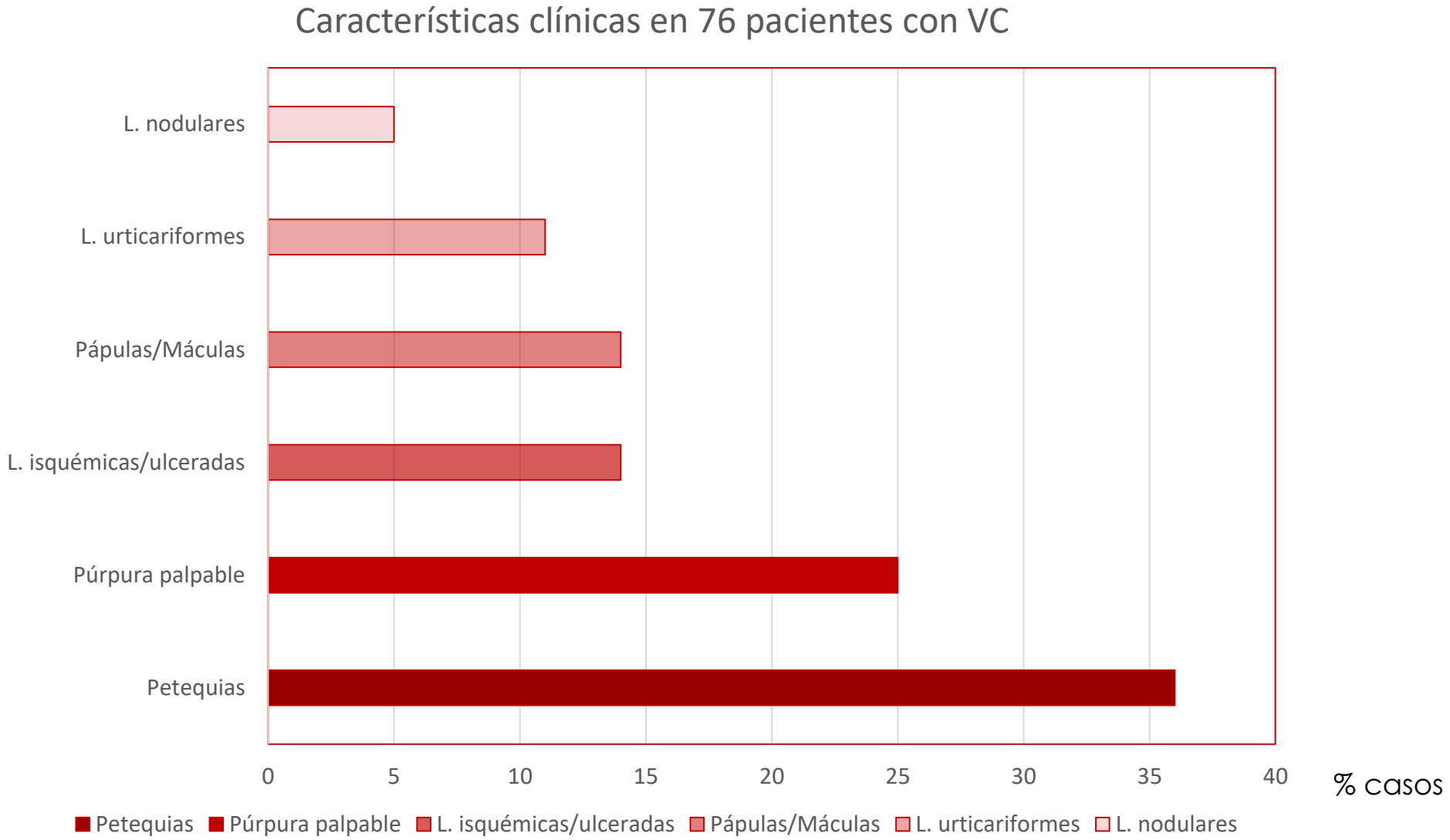
Vasculitis cutánea & LES

TABLE 1. Clinical Characteristics of Vasculitis in 76 Patients With SLE

	No. (%)
Demographic characteristic	
Female/male	68/8
Mean age at SLE diagnosis ± SEM (yr)	34.0 ± 1.77
Mean age at diagnosis of vasculitis ± SEM (yr)	37.8 ± 1.83
Length of SLE follow-up ± SEM (mo)	61.5 ± 8.50
White ethnicity	71 (93)
Local residence (Catalonia)	75 (99)
Cutaneous involvement	68 (89)
Erythematous punctate lesions	27 (36)
Palpable purpura	19 (25)
Ischemic/ulcerated lesions	11 (14)
Erythematous papules/macules	11 (14)
Urticarial lesions	8 (11)
Nodular lesions	4 (5)
Visceral involvement	14 (18)
Peripheral nerves	7 (9)
Kidney	2 (3)
Muscle	2 (3)
Lung	1 (1)
Gallbladder	1 (1)
Pancreas	1 (1)
Histologic biopsy	45 (59)
Leukocytoclastic vasculitis	29/45 (64)
Necrotizing vasculitis	10/45 (22)
Lymphocytic vasculitis	4/45 (9)
Other data	2 (5)

Ramos-Casals et al. Medicine 2006;85:95–104

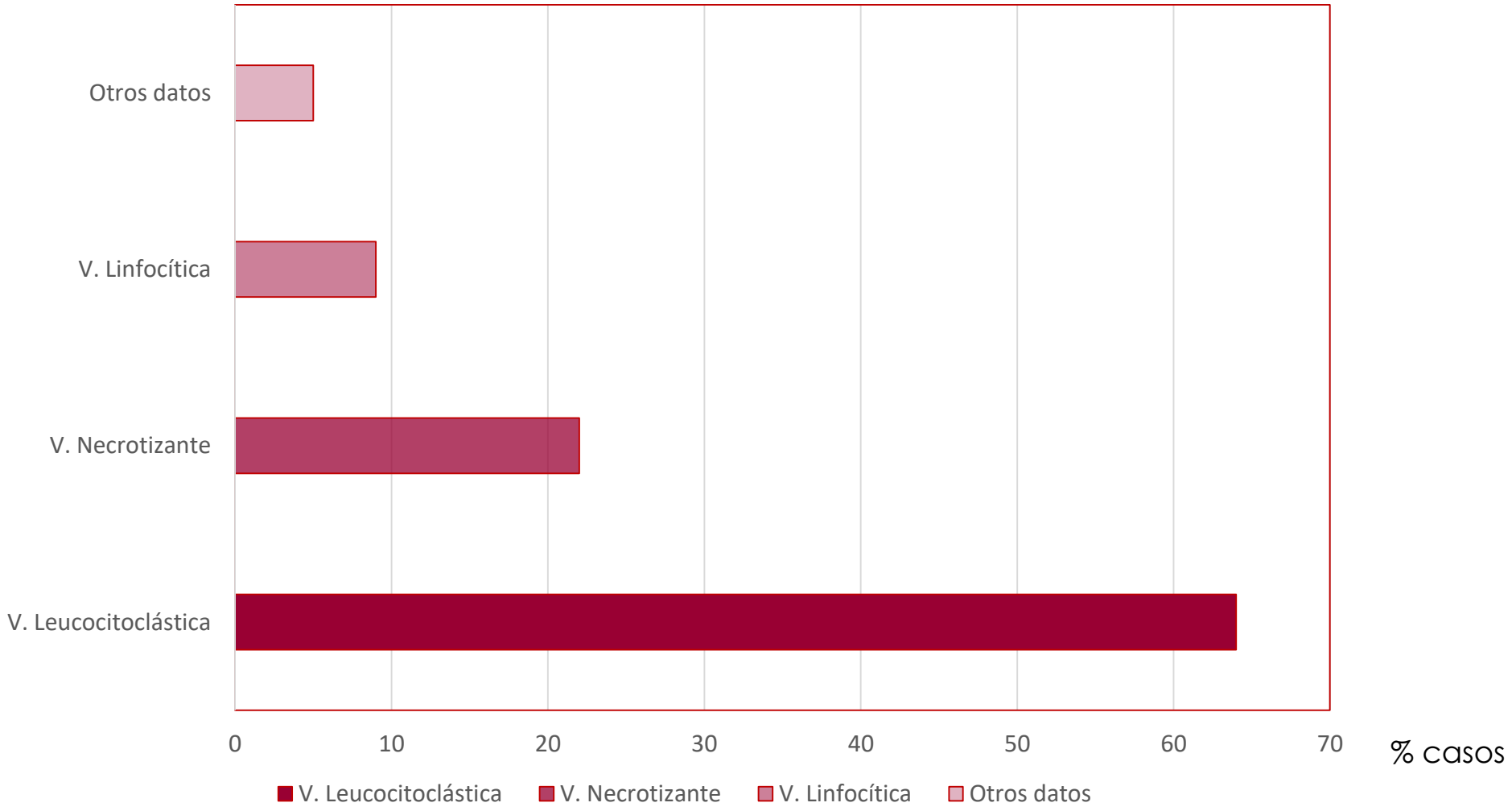
Vasculitis cutánea & LES



Ramos-Casals et al. Medicine 2006;85:95–104

Vasculitis cutánea & LES

Histología (*Biopsia en el 59% de los pacientes)



Ramos-Casals et al. Medicine 2006;85:95–104

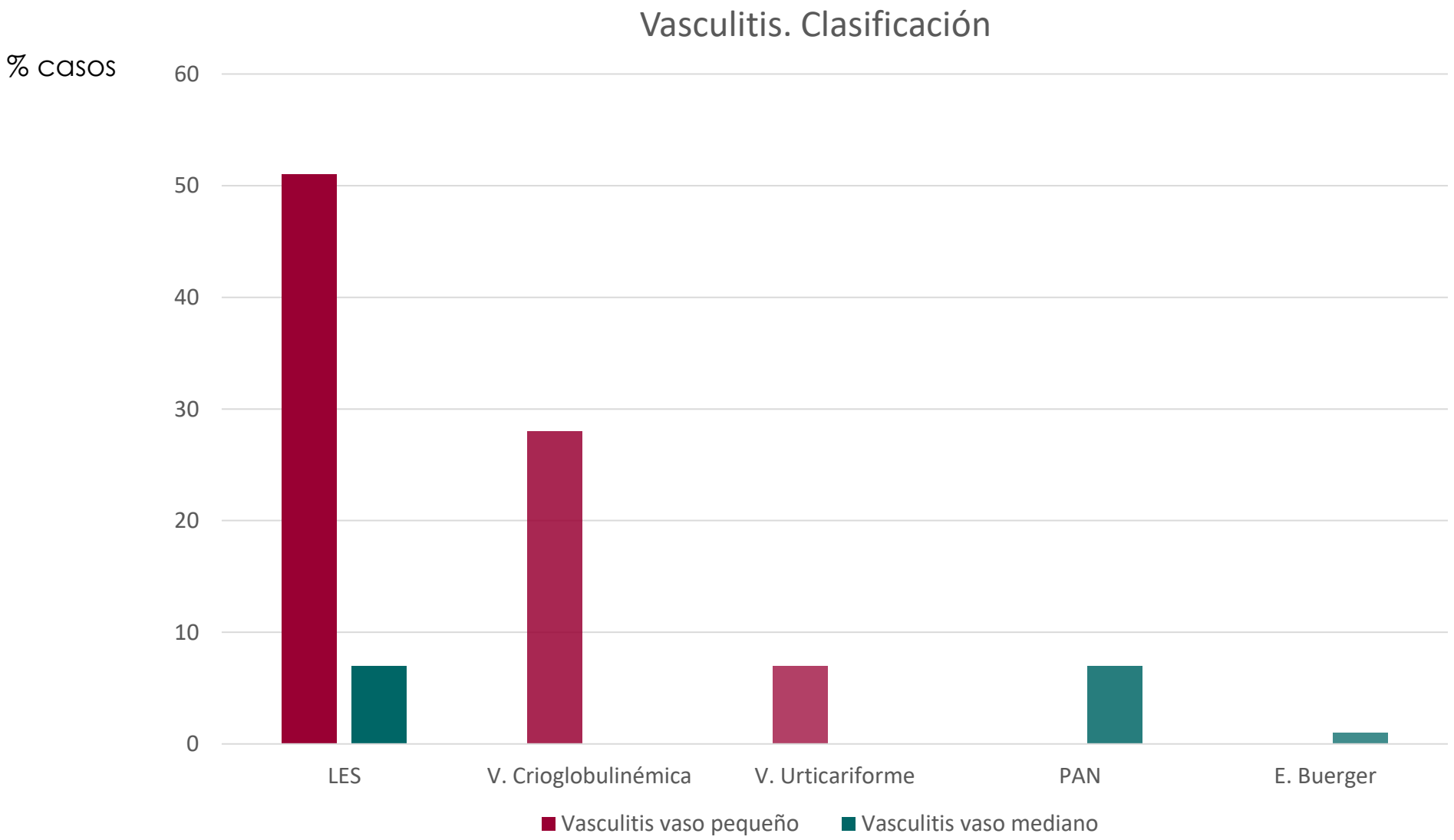
Vasculitis cutánea & LES

TABLE 2. Classification of Vasculitis in *76* Patients With SLE

	No. of Patients (%)	Female No. (%)	Mean Age (yr)	SLE Evolution (mo)	Predominant Cutaneous Lesion (%)	Histologic/ Angiographic Confirmation No. (%)
Small vessel vasculitis						
SVV secondary to SLE	39 (51)	35 (90)	32	50	Punctate (54)	19 (49)
Cryoglobulinemic vasculitis	21 (28)	18 (86)	36	61	Purpura (52)	10 (48)
Urticarial vasculitis	5 (7)	5 (100)	31	46	Hives (100)	5 (100)
Medium-sized vessel vasculitis						
MVV secondary to SLE	5 (7)	5 (100)	41	64	Ischemic (20)	5 (100)
PAN	5 (7)	4 (80)	41	196	Ischemic (20)	5 (100)
Buerger disease	1 (1)	1 (100)	34	36	Ischemic (100)	1 (100)

Ramos-Casals et al. Medicine 2006;85:95–104

Vasculitis cutánea & LES



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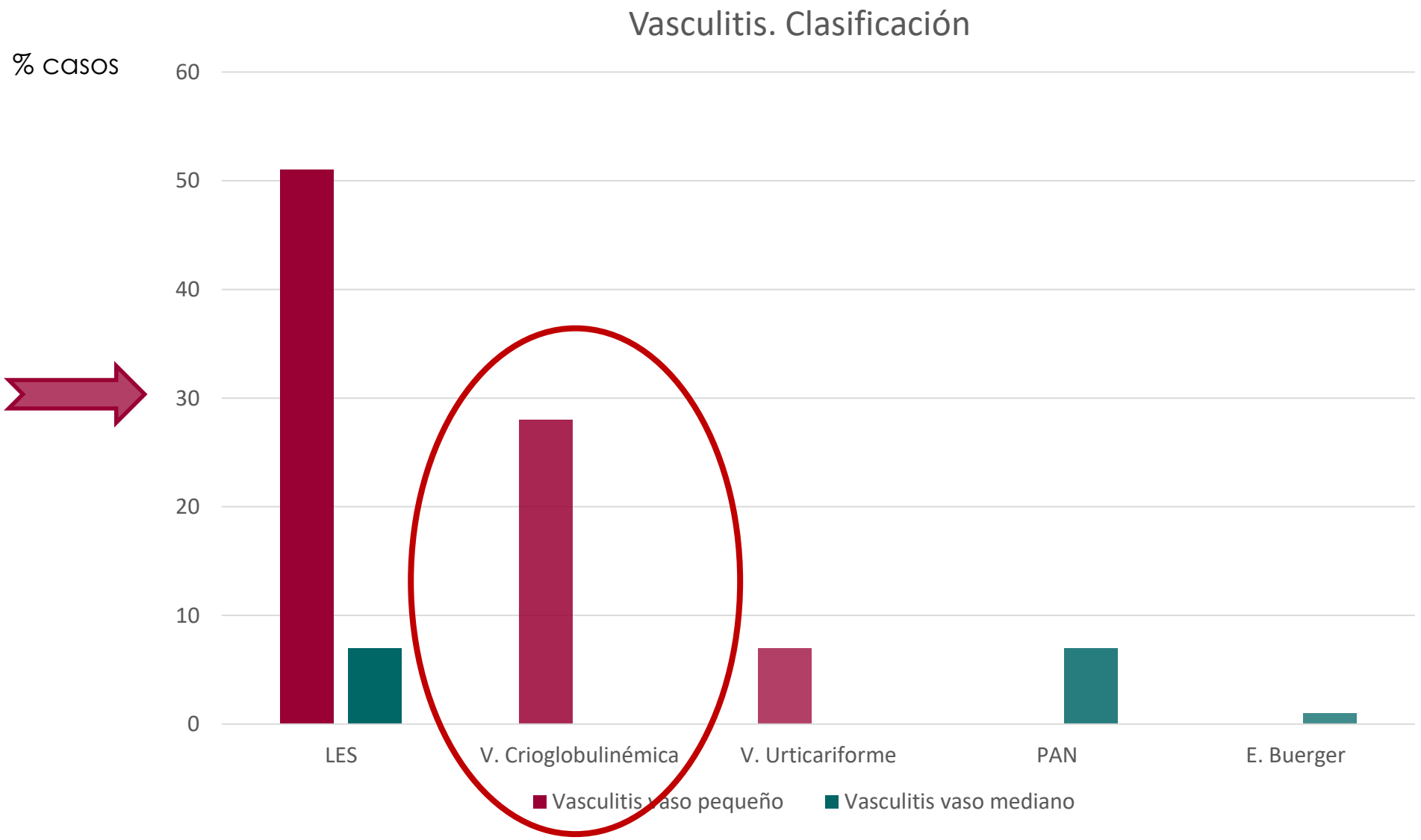
Vasculitis cutánea & LES



Ramos-Casals et al. Medicine 2006;85:95–104

Vasculitis cutánea & LES

TABLE 3. Main Clinical Features of 60 Patients With Vasculitis Diagnosed After SLE and Control Group

	Control Group (n = 60) No. (%)	SLE-Related Vasculitis (n = 60) No. (%)	Univariate Analysis (p < 0.05)	Multivariate Analysis (p < 0.05)
Arthritis	56 (93)	52 (87)	-	-
SLE-cutaneous lesions	40 (67)	44 (73)	-	-
Nephropathy	16 (27)	24 (40)	-	-
CNS involvement	10 (17)	13 (22)	-	-
Myositis	4 (7)	5 (8)	-	-
Livedo reticularis	2 (3)	13 (22)	0.004	**0.028**
Raynaud phenomenon	11 (18)	17 (28)	-	-
Fever	25 (42)	37 (62)	0.044	-
Sicca syndrome	6 (10)	7 (12)	-	-
APS	6 (10)	11 (18)	-	-
ECLAM (mean ± SEM)	3.87 ± 0.18	5.86 ± 0.21	<0.001	<0.001

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Vasculitis cutánea & LES

TABLE 4. Main Analytical and Immunologic Features of 60 Patients With Vasculitis Diagnosed After SLE and Control Group

	Control Group (n = 60) No. (%)	SLE-Related Vasculitis (n = 60) No. (%)	Univariate Analysis (p < 0.05)	Multivariate Analysis (p < 0.05)
Anemia	10 (17)	37 (62)	<0.001	0.001
Leukopenia	46 (77)	47 (78)	-	-
Lymphopenia	49 (82)	59 (98)	0.004	-
Thrombocytopenia	20 (33)	29 (48)	-	-
ESR >50 mm/h	9 (15)	36 (60)	<0.001	**0.001**
ANA	60 (100)	59 (98)	-	-
Anti-DNA	53 (88)	57 (95)	-	-
Hypocomplementemia	33 (55)	50 (83)	0.001	-
Anti-Ro/SS-A	13 (22)	18 (31)	-	-
Anti-La/SS-B	3 (5)	11 (19)	0.004	**0.014**
Anti-Sm	10 (17)	10 (17)	-	-
Anti-RNP	10 (18)	17 (29)	-	-
aPL	12 (23)	31 (52)	0.002	-

Ramos-Casals et al. Medicine 2006;85:95–104

Vasculitis cutánea & LES

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Vasculitis cutánea & LES

N= 50 LES

Lupus (2018) 27, 738–743
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PAPER

Cutaneous vasculitis in systemic lupus erythematosus patients: potential key players and implications

TA Gheita[1], NM Abaza[2], S Sayed[1], GS El-Azkalany[1], HS Fishawy[3] and AH Eissa[4]
[1]Rheumatology Department, Faculty of Medicine, Cairo University, Cairo, Egypt; [2]Rheumatology Department, Faculty of Medicine, Ain Shams University, Cairo, Egypt; [3]Internal Medicine Department, Faculty of Medicine, Cairo University, Cairo, Egypt; and [4]Clinical Pathology (Immunology) Department, Faculty of Medicine, Cairo University, Cairo, Egypt

Objectives: The aim of the present work was to study the clinical characteristics of cutaneous vasculitis (CV) in systemic lupus erythematosus (SLE) patients and find possible potential key players in its development and implicated associations with the disease manifestations. **Patients and methods:** Fifty adult female SLE patients underwent full history taking, thorough clinical examination and laboratory investigations. The SLE Disease Activity Index (SLEDAI) and accumulated damage using the Systemic Lupus International Collaborative Clinics/American College of Rheumatology Damage Index (SLICC/ACR DI) were assessed. **Results:** The mean age of the patients was 29.1 ± 6.1 years and was significantly lower in those with CV ($p = 0.018$). The disease duration was 4.9 ± 3.7 years. CV was present in 30% of the patients. Musculoskeletal manifestations and hypocomplementemia were present in all patients with CV. The SLEDAI and SLICC/ACR DI tended to be higher in those with CV. Complement (C3 and C4) was significantly consumed in CV patients ($p < 0.0001$). Antiphospholipids were comparable between those with and without CV. Lupus nephritis, cardiovascular manifestations and Sjögren syndrome were significantly linked to the development of CV ($p = 0.025$, $p = 0.023$ and $p < 0.0001$, respectively). Both C3 and C4 showed a high sensitivity (93.3% and 86.7%) to detect CV in SLE at cut-off values below 81.4 mg/dl and 16.8 mg/dl, respectively. **Conclusion:** CV is closely related to hypocomplementemia but not to antiphospholipids and is associated with lupus nephritis, musculoskeletal manifestations and Sjögren syndrome. *Lupus* (2018) **27,** 738–743.

Gheita et al. Lupus (2018) 27, 738–743

Vasculitis cutánea & LES

N= 50 LES

Table 3 Predictors for the risk of developing cutaneous vasculitis in systemic lupus erythematosus patients

Variables	*β* (p)	*CV in SLE patients* (n = *50*)
Age (years)	–0.13	(0.16)
Disease duration (years)	–0.15	(0.12)
Manifestations		
Musculoskeletal	0.14	(0.14)
Mucocutaneous	0.07	(0.37)
Lupus nephritis	0.26	**(0.025)**
Cardiovascular	–0.29	**(0.023)**
Sjögren syndrome	0.46	**(<0.0001)**
Chest	–0.1	(0.3)
Gastrointestinal	0.14	(0.16)
APS	–0.07	(0.51)
Laboratory		
C3 (mg/dl)	–0.58	**(<0.0001)**
C4 (mg/dl)	–0.32	**(0.001)**
ACL	–0.17	(0.09)
Anti-β2GP	–0.1	(0.32)
SLEDAI	–0.27	(0.03)
SLICC	–0.03	(0.79)

CV: cutaneous vasculitis; SLE: systemic lupus erythematosus; C: complement; aCL: anticardiolipin; anti-β2GP: anti-β2 glycoprotein; SLEDAI: Systemic Lupus Erythematosus Disease Activity Index; SLICC DI: Systemic Lupus International Collaborative Clinics Damage Index. Bold values are significant at $p < 0.05$.

Gheita et al. Lupus (2018) 27, 738–743

Vasculitis cutánea & LES

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Gheita et al. Lupus (2018) 27, 738–743

Table 5 Comparison of studies on SLE patients with CV to the findings of the present work

	SLE patients with CV				
Variable	*Drenkard et al.*[3]	*Akrekar et al.*[16]	*Wu et al.*[20]	*Shinjo and Bronfá*[28]	*Current study*
Country	Mexico	India	Taiwan	Brazil	Egypt
CV *n* (%)	170/540 (31.5%)	Case report	12/83 (14.5%)	91/254 (35.8%)	15/50 (30%)
Age at onset	25.8 ± 9.9 years	20 years	NA	NA	21.4 ± 4.01 years
Complement	NA	NA	Reduced	NA	Reduced
Disease activity	CV is less likely with remission	Increased	NA	NA	SLEDAI 8.7 ± 10.3 years
Reported associations	Myocarditis Psychosis Raynaud's Serositis	Neuropsychiatric	NA	Photosensitivity Malar rash Raynaud's Anti-ribosomal-P	Lupus nephritis Cardiovascular Sjögren syndrome Reduced C3/C4

CV: cutaneous vasculitis; SLEDAI: Systemic Lupus Erythematosus Disease Activity Index; C: complement; NA: not available.

Gheita et al. Lupus (2018) 27, 738–743

Vasculitis cutánea & LES

Table 5 Comparison of studies on SLE patients with CV to the findings of the present work

	SLE patients with CV				
Variable	*Drenkard et al.*[3]	*Akrekar et al.*[16]	*Wu et al.*[20]	*Shinjo and Bronfá*[28]	*Current study*
Country	Mexico	India	Taiwan	Brazil	Egypt
CV *n* (%)	170/540 (31.5%)	Case report	12/83 (14.5%)	91/254 (35.8%)	15/50 (30%)
Age at onset	25.8 ± 9.9 years	20 years	NA	NA	21.4 ± 4.01 years
Complement	NA	NA	Reduced	NA	Reduced
Disease activity	CV is less likely with remission	Increased	NA	NA	SLEDAI 8.7 ± 10.3 years
Reported associations	Myocarditis Psychosis Raynaud's Serositis	Neuropsychiatric	NA	Photosensitivity Malar rash Raynaud's Anti-ribosomal-P	Lupus nephritis Cardiovascular Sjögren syndrome Reduced C3/C4

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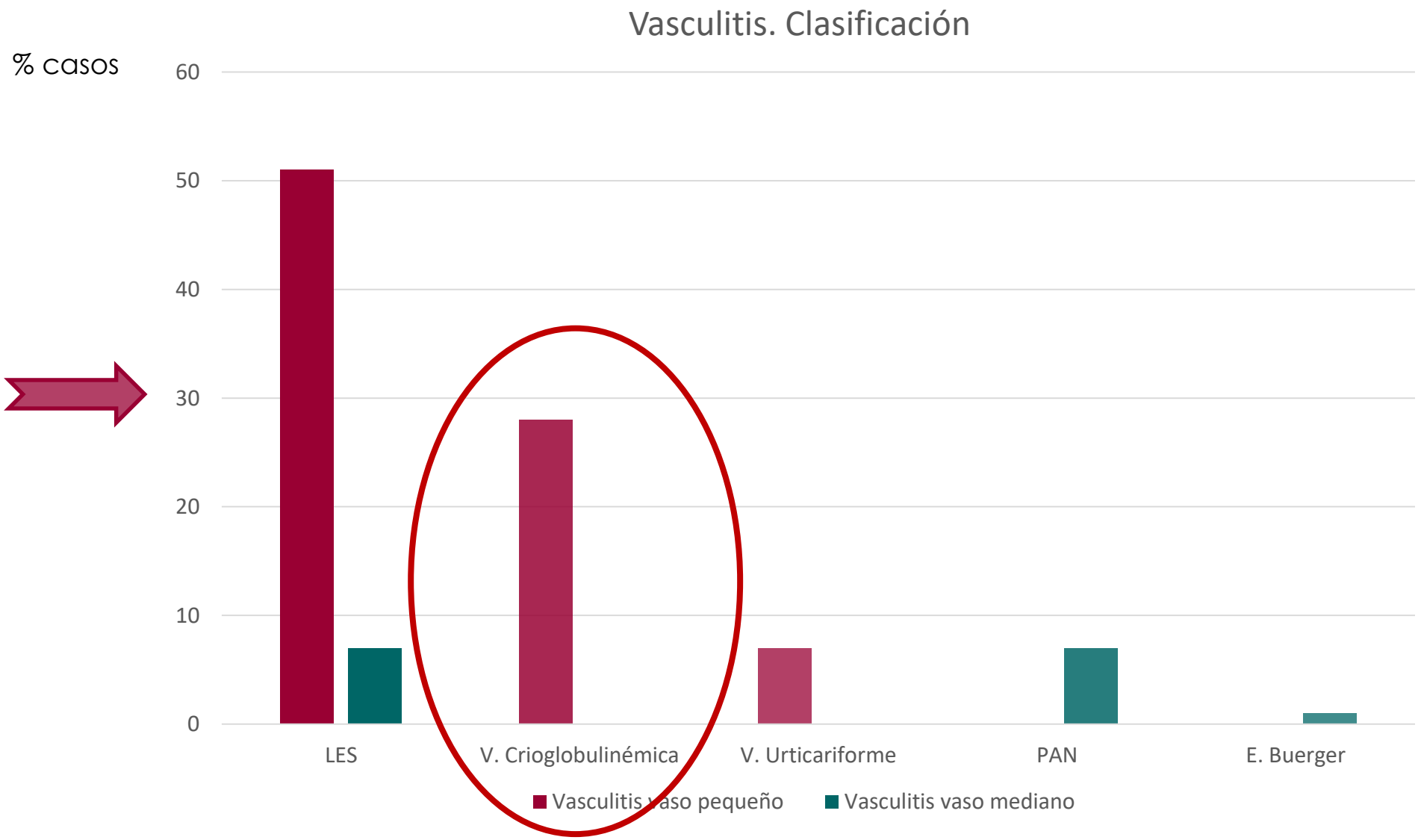
Gheita et al. Lupus (2018) 27, 738–743

Vasculitis cutánea & LES



Ramos-Casals et al. Medicine 2006;85:95–104

Vasculitis cutánea & LES

Semin Arthritis Rheum. 2001 Apr;30(5):366-73.

Cryoglobulinemia in systemic lupus erythematosus: prevalence and clinical characteristics in a series of 122 patients.

García-Carrasco M[1], Ramos-Casals M, Cervera R, Trejo O, Yagüe J, Sisó A, Jiménez S, de La Red G, Font J, Ingelmo M.

Author information

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Abstract

OBJECTIVES: To determine the prevalence and nature of cryoglobulins in 122 patients with systemic lupus erythematosus (SLE) and identify the clinical and immunologic features related to their presence.

METHODS: In a cross-sectional study, we investigated 122 consecutive patients (106 women and 16 men) with SLE who fulfilled the 1982 revised criteria of the American College of Rheumatology for the classification of SLE. All patients had documented medical histories and underwent a medical interview as well as a routine general physical examination by a qualified internist, and their clinical and serologic characteristics were collected on a protocol form. Serum samples were obtained at 37 degrees C, and cryoglobulinemia was estimated by centrifugation at 4 degrees C after incubation for 7 days in all patients. The type of cryoglobulinemia was identified by agarose gel electrophoresis and immunofixation.

RESULTS: Cryoglobulins were detected in the sera of 31 SLE patients (25%): 20 patients (65%) had a cryocrit lower than 1%, 8 (26%) had percentages ranging between 1% and 5%, and only 3 patients (9%) had a cryocrit over 5%. Only cutaneous vasculitis (39% v 16%; P = .01) was more prevalent in patients with than in those without cryoglobulins. Rheumatoid factor (RF) (42% v 15%; P = .002) and low CH50 levels (84% v 49%; P <.001) were more prevalent in SLE patients with cryoglobulins. Hepatitis C virus (HCV) infection was investigated in 24 of the 31 cryoglobulinemic SLE patients and was detected in 5 (21%). In comparison, 4 (5%) of the 75 noncryoglobulinemic SLE patients studied were positive (P = 0.035; odds ratio, 4.67). Patients with a cryocrit greater than 1% showed a higher frequency of HCV infection than those with a cryocrit less than or equal to 1% (46% v 0%, P = .01).

García-Carrasco et al. Semin Arthritis Rheum. 2001 Apr;30(5):366-73.

Vasculitis cutánea & LES

122 LES

Crioglobulinemia

Determinación de Crioglobulinemia:

- Suero obtenido a 37 ºC
- Centrifugación a 4 ºC tras Íncubación 7 días

- Crioglobulinemia + en 31 pacientes (25%)
  - 20 (65%) Criocrito ≤ 1%
  - 8 (26%) criocrito entre 1%-5%
  - 3 (9%) Criocrito ≥ 5%
- VC fue más prevalente en pacientes con crioglobulinas + (39% v 16%; P = 0.01)
- Factor Reumatoide (RF) (42% v 15%; P = .002) y Niveles bajos CH50 (84% v 49%; P <.001) más prevalentes en LES con crioglobulinas +
- Virus Hepatitis C
  - Crioglobulinemia + : 21% VHC positivo*
  - Crioglobulinemia - : 5% VHC positivo**

*Investigado en 24 de 31 pacientes
** Investigado en 75 pacientes

García-Carrasco et al. Semin Arthritis Rheum. 2001 Apr;30(5):366-73.

Vasculitis cutánea & LES

122 LES

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Vasculitis cutánea & LES

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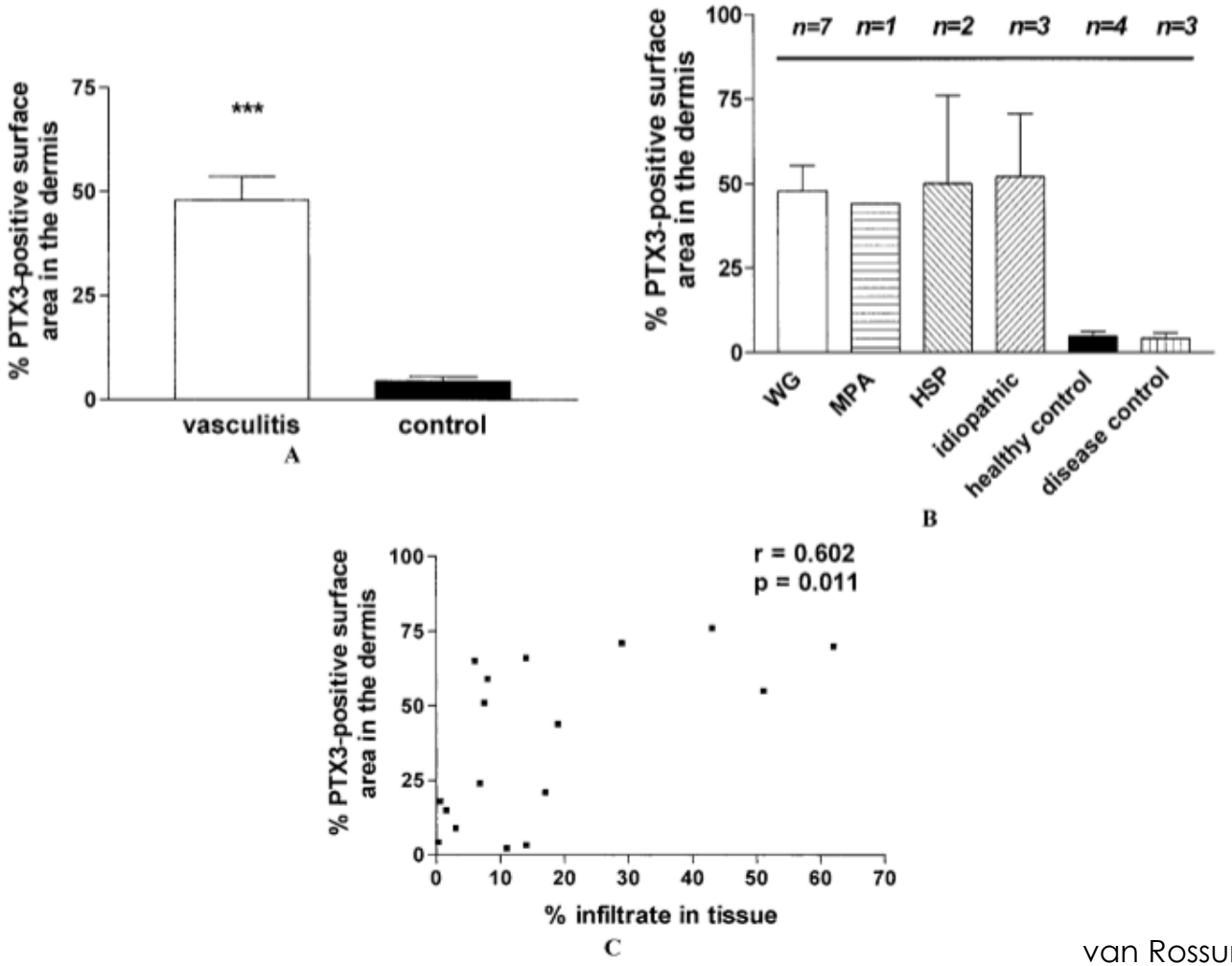
Vasculitis cutánea & LES

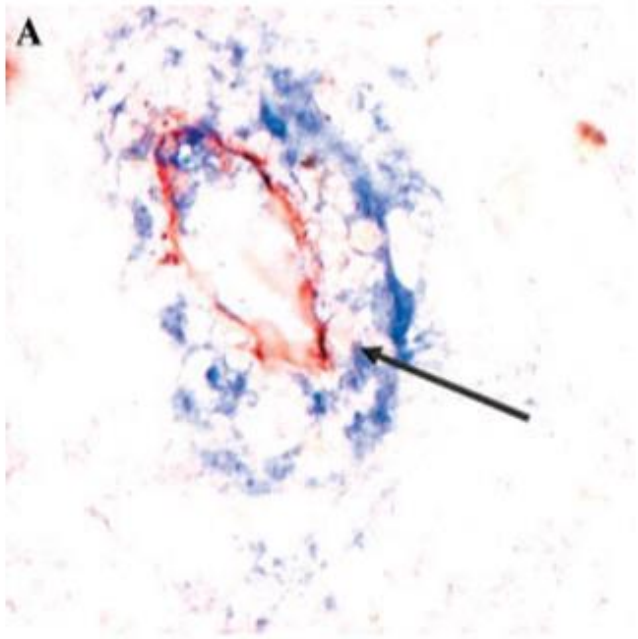
Pentraxina-3

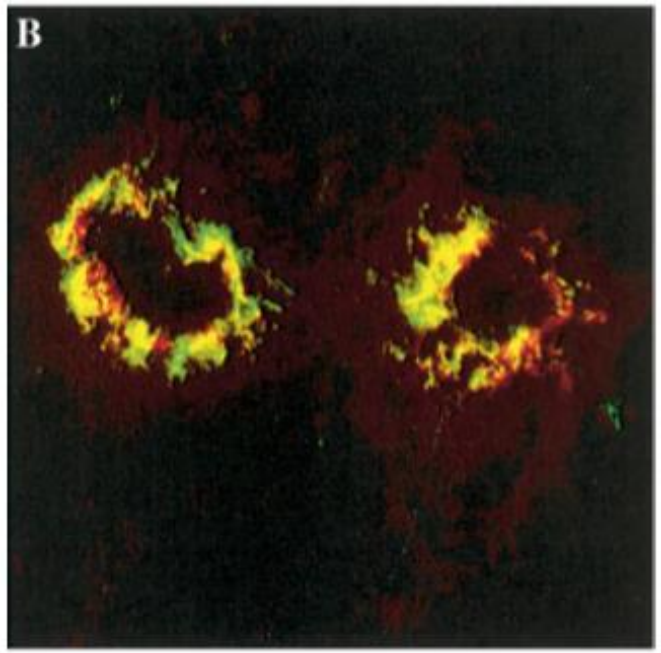


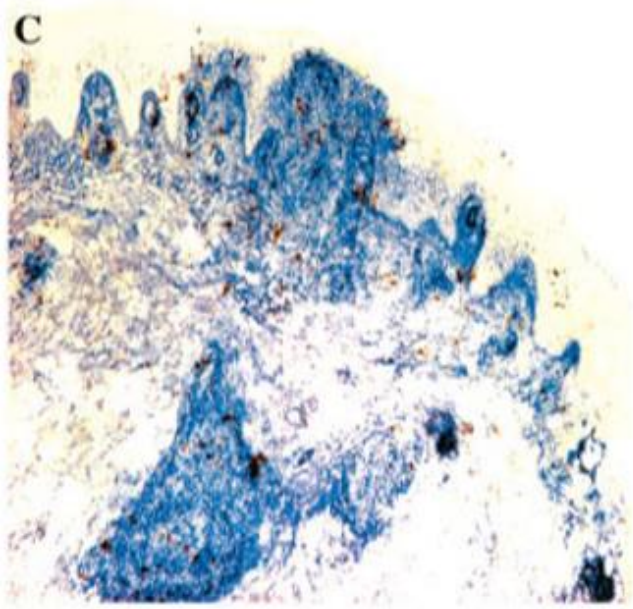
van Rossum et al. ARTHRITIS & RHEUMATISM Vol. 54, No. 3, March 2006, pp 986–991 DOI 10.1002/art.21669

Vasculitis cutánea & LES

Pentraxina-3







van Rossum et al. ARTHRITIS & RHEUMATISM Vol. 54, No. 3, March 2006, pp 986–991 DOI 10.1002/art.21669

Vasculitis cutánea & LES

N = 117
- 76 LES
- 41 control

Pentraxina-3

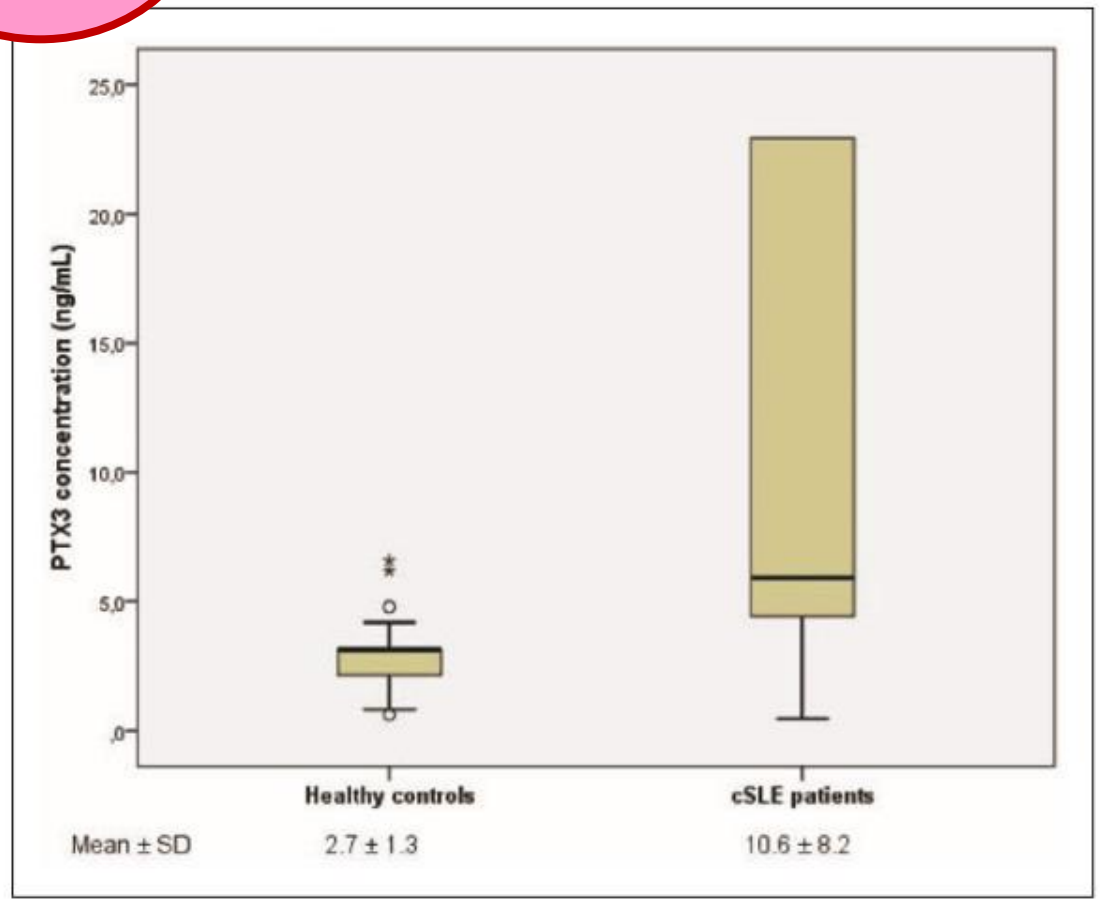


Figure 1 Comparison of serum PTX3 concentrations between cSLE patients and healthy controls.

- Niveles de Pentraxina-3 significativamente elevados en niños con LES frente a controles sanos
- Correlación con SLEDAI
- Niveles aumentados en presencia de manifestaciones mucocutáneas, FR y vasculitis

Sahin et al. Lupus (2017) 26, 1089–1094

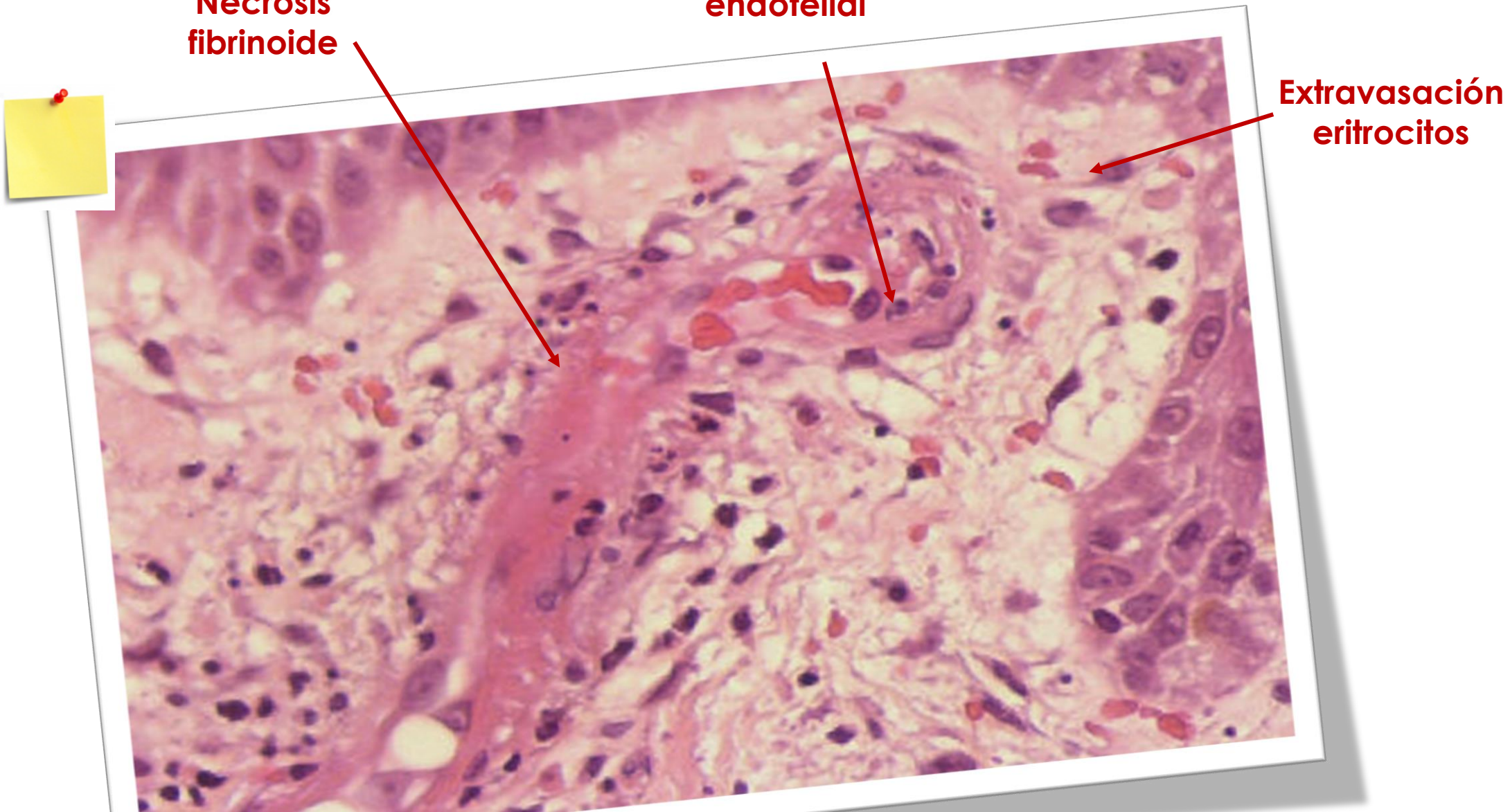
Conclusiones

- Vasculitis no es una manifestación común en el LES (10-12%)
- Vasculitis cutánea es la forma más frecuente de vasculitis en LES (*≈30%*)
  - Vasculitis de vaso pequeño (leucocitoclástica)
  - Vasculitis por depósito de inmnocomplejos / Activación del complemento
- Asociación con Nefritis Lúpica
- La presencia de crioglobulinemia no es rara en el contexto del LES y puede ser un factor precipitante de VC
- La presencia de crioglobulinemia obliga a estudio de VHC
- PTX-3 podría ser un prometedor biomarcador de Vasculitis en pacientes con LES

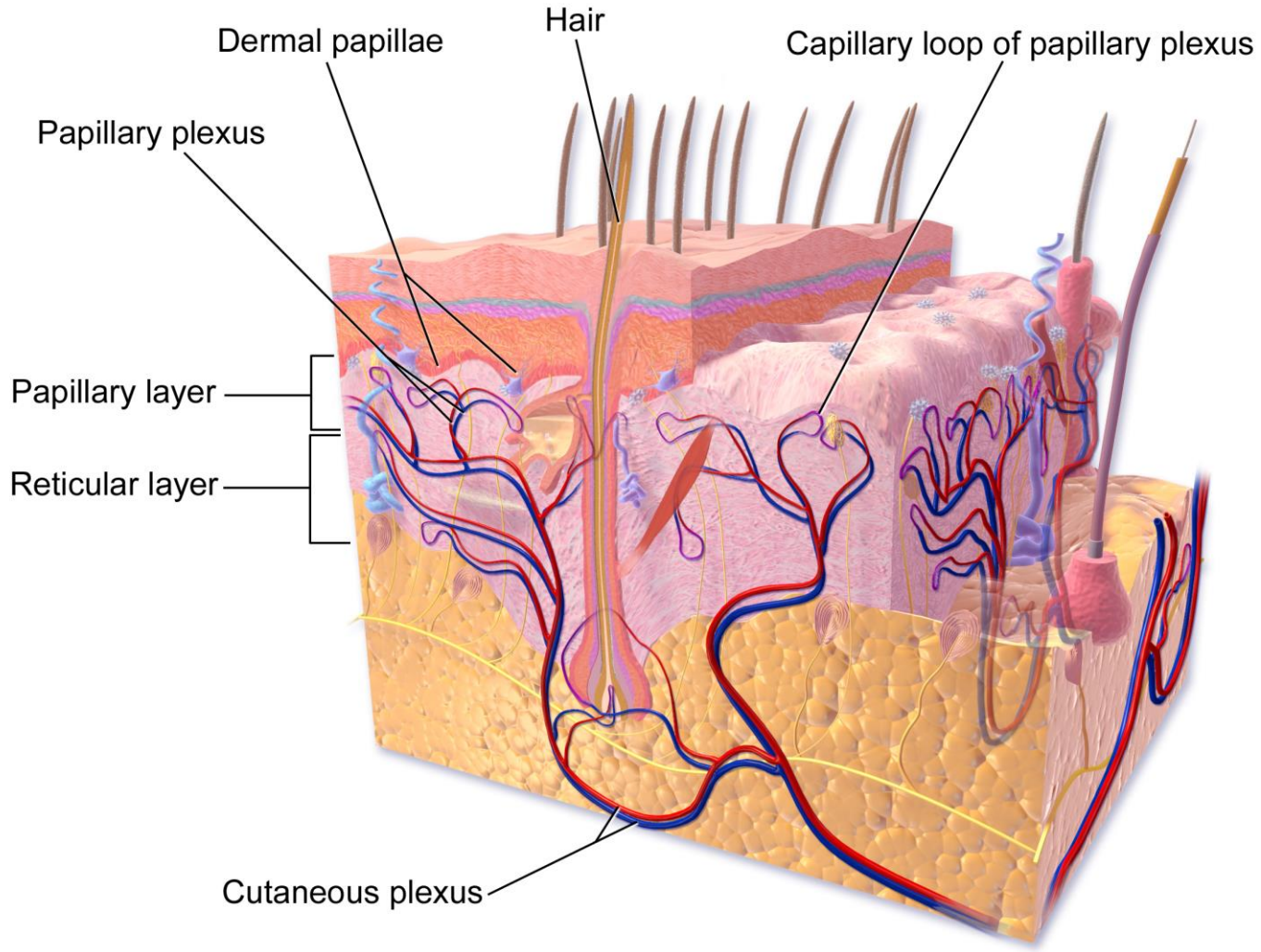
Referencias

BACK-UP

Vasculitis cutánea & LES

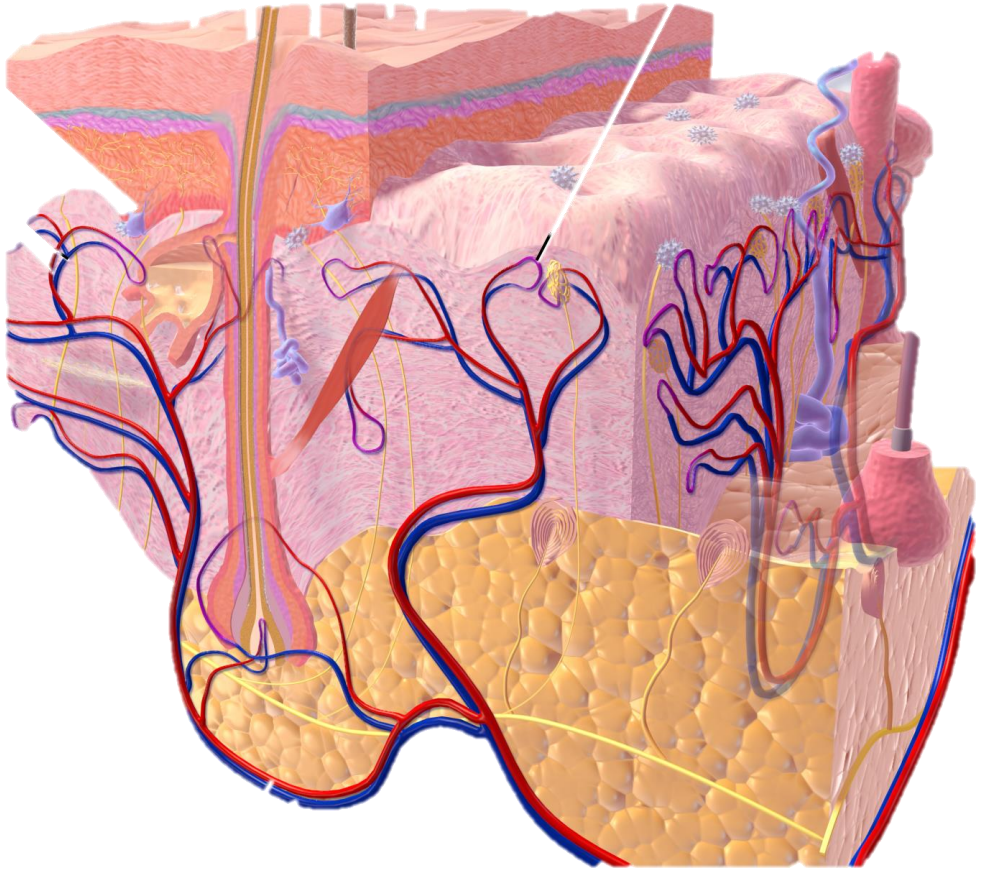


Anatomía de la piel

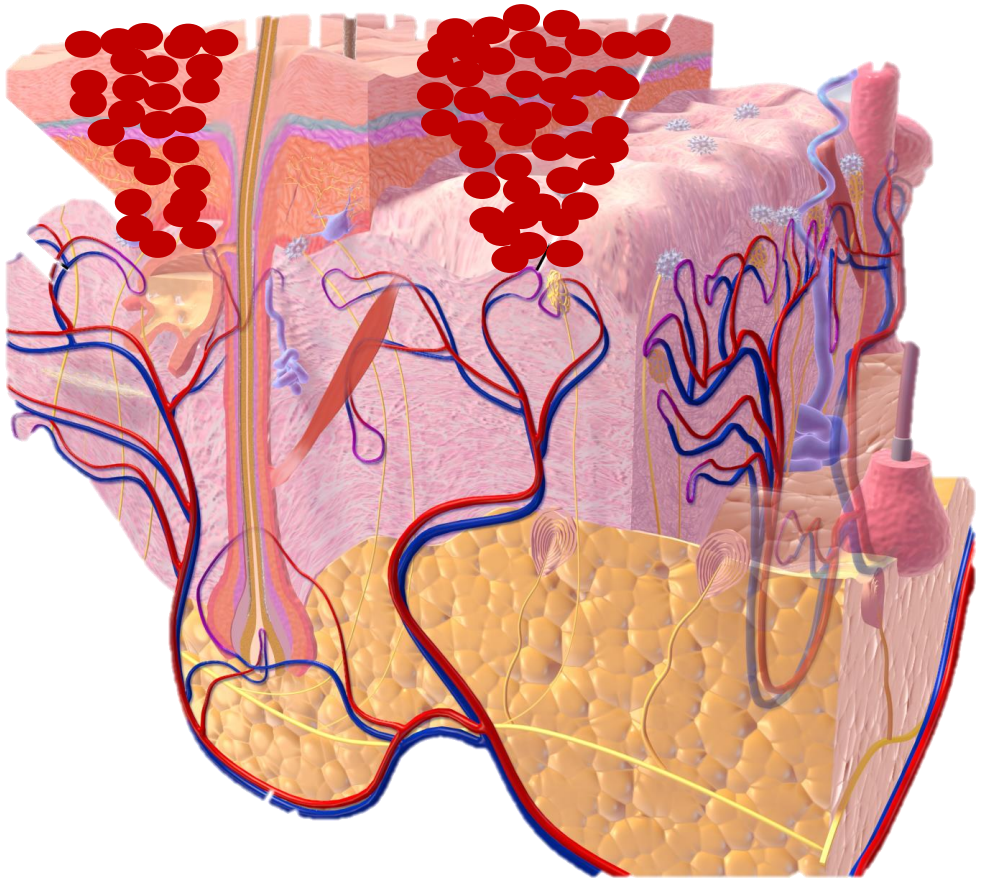


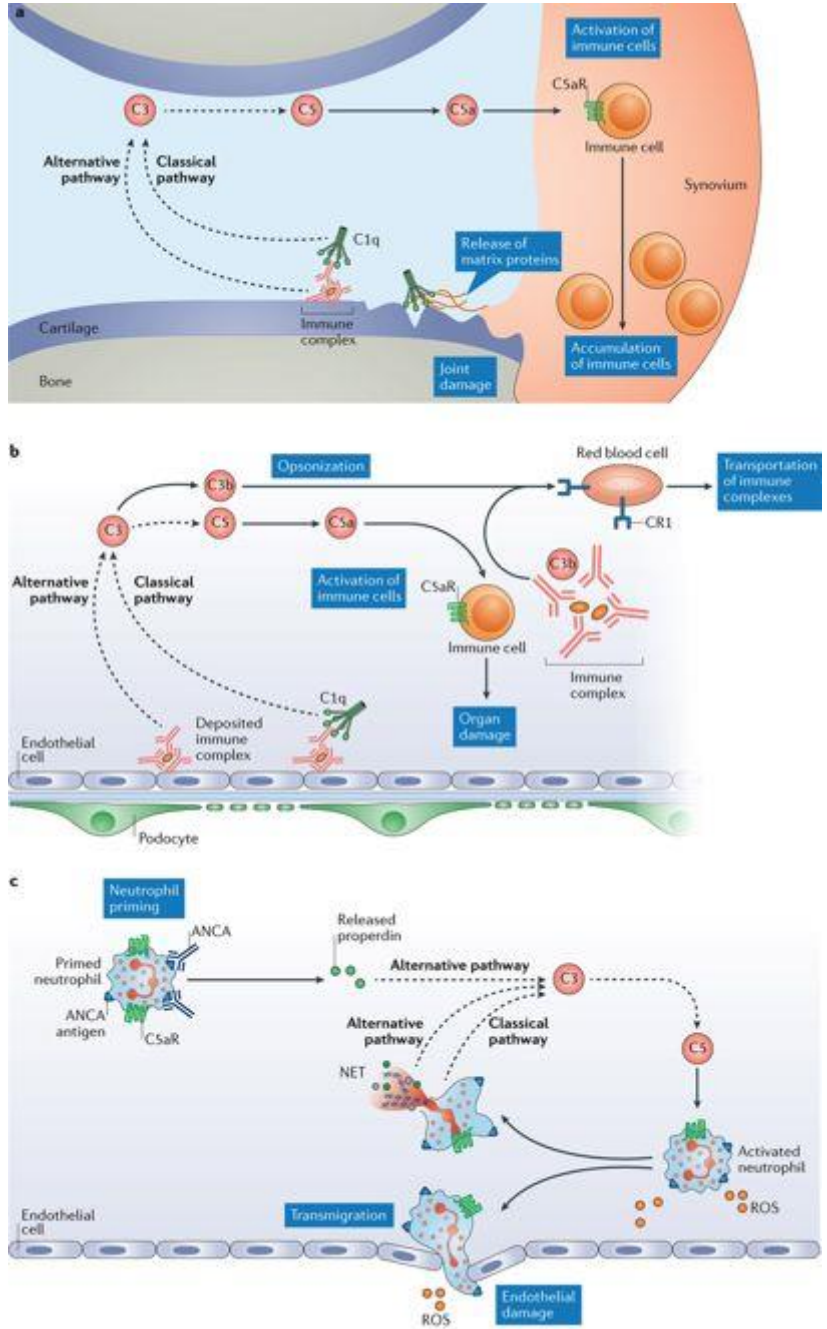
Dermal Circulation

Anatomía de la piel



Anatomía de la piel




a
Activation of immune cells
C5aR
C3
C5
C5a
Immune cell
Alternative pathway
Classical pathway
Synovium
C1q
Release of matrix proteins
Cartilage
Immune complex
Accumulation of immune cells
Bone
Joint damage
b
Opsonization
Red blood cell
Transportation of immune complexes
C3b
C3
C5
C5a
CR1
Alternative pathway
Classical pathway
Activation of immune cells
C5aR
C3b
Immune cell
Immune complex
C1q
Organ damage
Endothelial cell
Deposited immune complex
Podocyte
c
Neutrophil priming
ANCA
Released properdin
Primed neutrophil
Alternative pathway
C3
ANCA antigen
C5aR
Alternative pathway
Classical pathway
C5
NET
Activated neutrophil
ROS
Endothelial cell
Transmigration
ROS
Endothelial damage

Vasculitis cutánea & LES

RHEUMATOLOGY

Rheumatology 2014;53:1504–1512
doi:10.1093/rheumatology/keu137
Advance Access publication 31 March 2014

Original article

Mucocutaneous manifestations in a UK national cohort of juvenile-onset systemic lupus erythematosus patients

Direkrit Chiewchengchol[1], Ruth Murphy[2], Thomas Morgan[1], Steven W. Edwards[3], Valentina Leone[4], Mark Friswell[5], Clarissa Pilkington[6], Kjell Tullus[6], Satyapal Rangaraj[7], Janet E. McDonagh[8], Janet Gardner-Medwin[9], Nick Wilkinson[10], Phil Riley[11], Jane Tizard[12], Kate Armon[13], Manish D. Sinha[14], Yiannis Ioannou[15], Rebecca Mann[16], Kathryn Bailey[17,18], Joyce Davidson[19], Eileen M. Baildam[20], Clare E. Pain[20], Gavin Cleary[20], Liza J. McCann[20] and Michael W. Beresford[1], on behalf of the UK JSLE Study Group

Abstract

Objective. To determine whether mucocutaneous manifestations are associated with major organ involvement in a UK national cohort of juvenile-onset SLE (JSLE) patients.

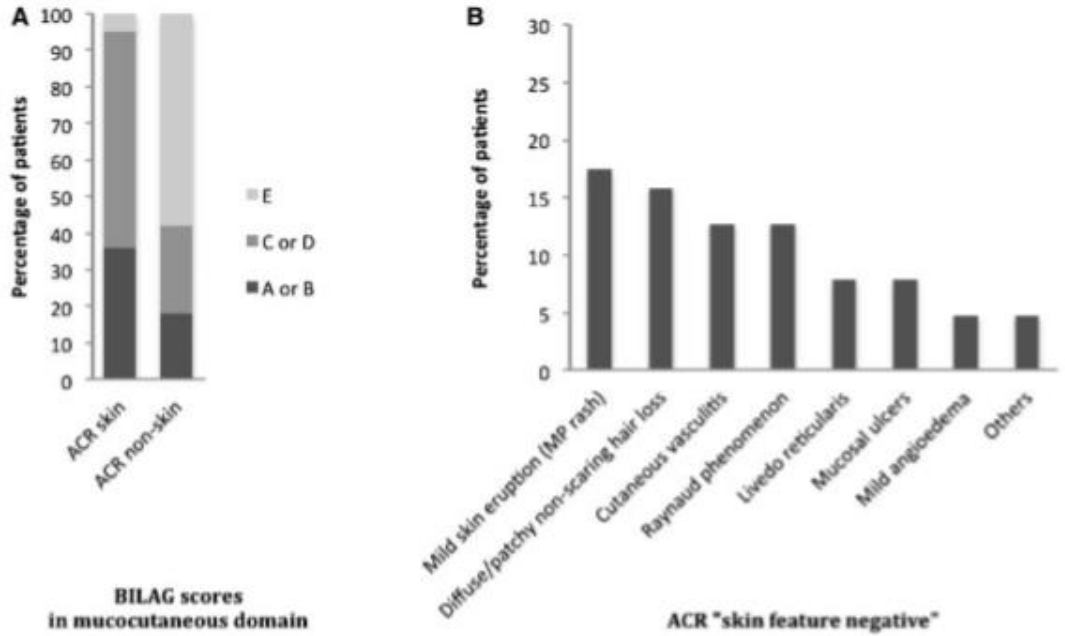
Methods. JSLE patients ($n = 241$) from 15 different centres whose diagnosis fulfilled four or more of the ACR criteria were divided into two groups: those with at least one ACR mucocutaneous criterion (ACR skin feature positive) and those without (ACR skin feature negative) at diagnosis. The relative frequency of skin involvement was described by the paediatric adaptation of the 2004 British Isles Lupus Assessment Group (pBILAG-2004) index.

Results. One hundred and seventy-nine patients (74%) had ACR-defined skin involvement with no sig-

Chiewchengchol et al. Rheumatology 2014;53:15041512
doi:10.1093/rheumatology/keu137

Vasculitis cutánea & LES

FIG. 1 Patients with mucocutaneous involvement according to the pBILAG-2004 index



Percentage of ACR skin feature positive (ACR skin, $n = 179$) and ACR skin feature negative (ACR non-skin, $n = 62$) patients with mucocutaneous involvement according to the scores from mucocutaneous domain in the pBILAG-2004 index at the time of diagnosis. **(A)** Patients were scored alphabetically as A, B, C, D or E (score A or B is moderate to severe disease activity, score C or D is mild or inactive disease and score E is no mucocutaneous involvement). **(B)** Percentage of ACR skin feature negative patients ($n = 62$) with mucocutaneous involvement in each subdomain of mucocutaneous domain by p-BILAG 2004 index at time of diagnosis.

pBILAG-2004 index in the mucocutaneous domain at diagnosis: 11 patients (18%) had a score of A or B and 11 ACR skin feature-negative patients (54%, $P < 0.05$) (Fig. 2A).

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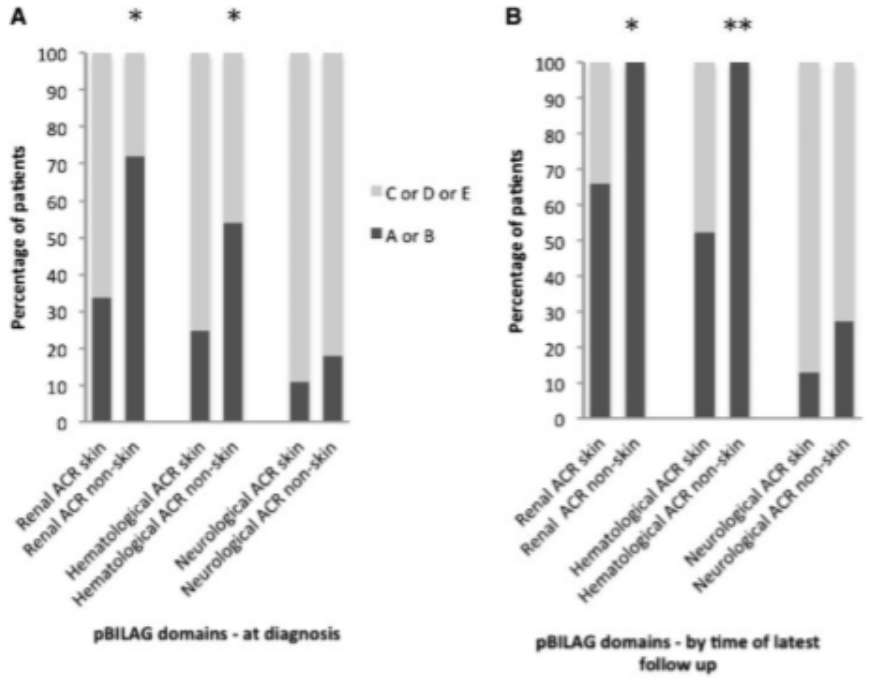
Vasculitis cutánea & LES

FIG. 2 pBILAG-2004 scores of both groups of patients who had moderate to severe mucocutaneous involvement



Percentage of ACR skin feature positive (ACR skin, $n=65$) and ACR skin feature negative (ACR non-skin, $n=11$) patients who had moderate to severe mucocutaneous involvement by p-BILAG 2004 score and had score A or B in three major organ-based BILAG domains at the time of diagnosis (**A**), or had at least once passed score A or B from the time of diagnosis until the latest follow-up (**B**). Score A or B: moderate to severe involvement; score C or D or E: inactive or stable or no symptoms. Pearson Chi-square test was performed (*$P<0.05$, **$P<0.01$).

Discussion

Previous studies using the ACR criteria have reported a positive relationship between cutaneous lupus lesions,

eumatology 2014;53:15041512
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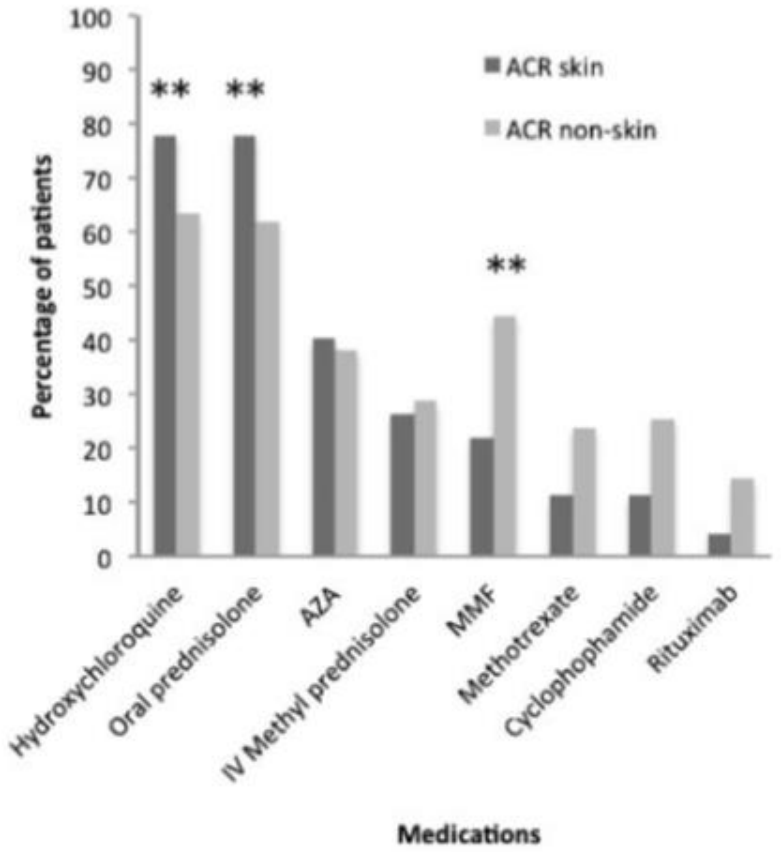
Vasculitis cutánea & LES

FIG. 3 Medication use over the course of the follow-up period for both groups of patients



Medication usage among patients in ACR skin feature positive (ACR skin, $n = 179$) and ACR skin feature negative

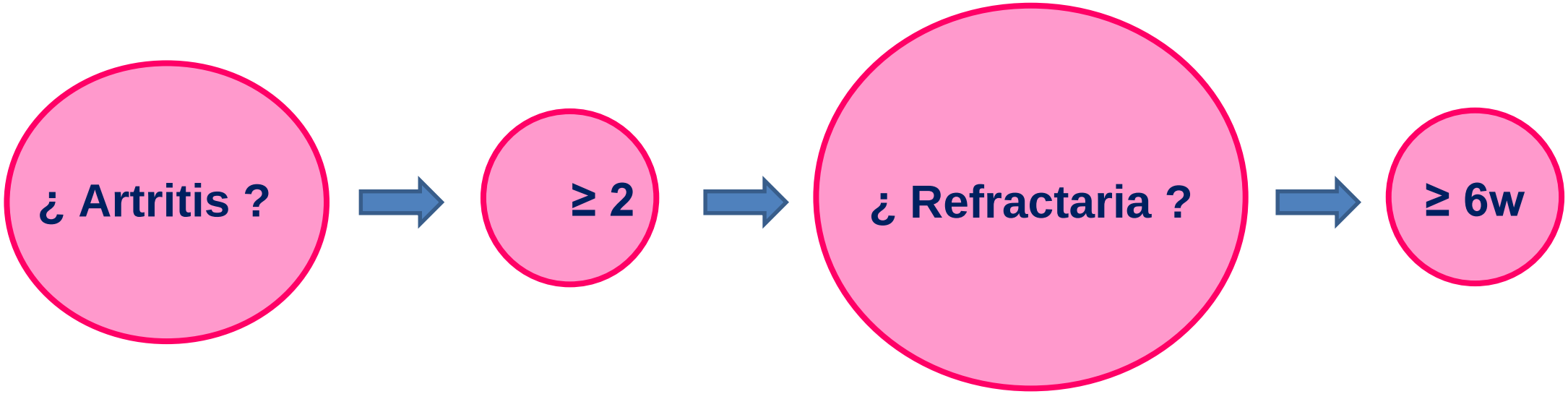
involvement. Visible mucocutaneous signs may allow early diagnosis before more internal organ involvement develops, while those without these features may take longer to be recognized and diagnosed.

There are a number of other important mucocutaneous manifestations commonly found in JSLE patients apart from the four listed in the ACR criteria. Among the ACR skin feature–negative patients (i.e. undetected using ACR criteria at the time of diagnosis), 42% actually had mucocutaneous involvement according to the pBILAG-2004. The lesions included maculopapular lupus rash, diffuse or patchy non-scarring alopecia, cutaneous vasculitis and RP. Moreover, 18% of these patients had moderate to severe mucocutaneous involvement (score A or B) at the time of diagnosis. This finding indicated that important and clinically significant mucocutaneous manifestations also commonly occur in JSLE patients. These additional lesions are also associated with systemic disease activity and severity [11, 12, 17, 28]. Therefore this study further investigated these manifestations in ACR skin feature–negative patients using the pBILAG-2004 index.

Patients who did not have skin lesions (as defined by the ACR diagnostic criteria) but had other major mucocutaneous manifestations of the disease (score A or B) had a significantly higher incidence of renal and haematological

14;53:15041512
doi:10.1093/rheumatology/keu137

Vasculitis cutánea & LES



Tratamiento

- Se

Tratamiento

- ETN:

- RTX:
- 7 cohortes (Definiciones de mejoría articular diferentes)
- Respuesta parcial / complete en el 72% – 81,5 % a corto plazo (3- 6 meses) y del 36,6% al 93% a largo plazo (≥12 meses)

Vasculitis cutánea & LES

Vasculitis cutánea & LES

Vasculitis cutánea & LES

Tratamiento