rheumatic diseases 16 years after launching the first version of the same study.[6] The increasing prevalence of rheumatic diseases in a context of an aging population can translate into an increase in the demand for health care and into the need for more human recourses to attend to this situation.[7,8] The data obtained in EPISER, in combination with the results of this work, may be useful in decision making in the context of health systems.

This report has certain limitations. Although the database utilized is based on the information provided by members of the SER, there can be some imprecisions, aside from the margin of error, which has been considered minimal. For the analysis of these results, we must take into account that it has been assumed that 95% of the rheumatologists in Spain are members of the SER and are included in the organization's database. A deviation of 10% (that is, that there were another 95 rheumatologists not included in the database of members of the SER) would suppose that the number of rheumatologists per 100 000 population in all of Spain could reach 2.2. To achieve 2.5 rheumatologists per 100 000 population in all of Spain, there would have to be 221 rheumatologists not associated with the SER.

In conclusion, although the interpretation of the number of specialists per 100 000 population may be controversial, the results of this report enable us to evaluate how rheumatology is facing the health care challenges that are being presented in recent years, and that will not be detained in the near future. The potential sociodemographic changes, which could affect the prevalence of rheumatic diseases, make further work necessary to enable us to analyze not only the present situation, but to also consider the future outlook of rheumatology in Spain.

References

1. U.S. Department of Health and Human Services. Physician workforce policy guidelines for the United States, 2000–2020. Sixteenth report; 2005.
2. Mable A, Marriott J. Steady state—finding a sustainable balance point: international review of health workforce planning. Wolfe Island, Ontario: Health Human Resources Strategies Division, Health Canada; 2001.
3. González López-Valcárcel B, Barber Pérez P. Dificultades, trampas y tópicos en la planificación del personal médico. Gac Sanit. 2008;22:393–5.
4. López-Valcárcel BG, Pérez PB. Oferta y necesidad de médicos especialistas en España (2006-2030). España: Grupo de Investigación en Economía de La Salud Universidad de Las Palmas de Gran Canaria; 2007.
5. Pérez PB, López-Valcárcel BG. Oferta y necesidad de especialistas médicos en España (2008-2025). Canarias: Universidad de las Palmas de Gran Canaria; 2009.
6. Bustabad S, Diaz-Gonzalez F. EPISER 2016 study: why another epidemiological study? Reumatol Clin. 2017;13:1–3.
7. Bernabeu-Wittel M, Barón-Franco B, Nieto-Martín D, Moreno-Gaviño L, Ramírez-Duque N, Ollero-Baturone M. Estratificación pronóstica y abordaje asistencial de los pacientes pluripatológicos. Rev Clin Esp. 2017;217:410–9.
8. Lázaro y de Mercado P, Blasco Bravo AJ, Lázaro y de Mercado I, Castañeda S, López Robledillo JC. La Reumatología en la Comunidad de Madrid: disponibilidad actual de reumatólogos y necesidades futuras aplicando un modelo predictivo. Reumatol Clin. 2013;9:353–8.

Carlos Sanchez-Piedra,[a] Beatriz Yoldi,[b] Marta Valero,[c] José Luis Andreu,[d] Federico Díaz-González,[a,e,*] Juan Jesús Gómez-Reino[a], on behalf of the Grupo de trabajo BIOBADASER Fase III

[a] *Unidad de Investigación, Sociedad Española de Reumatología, Madrid, Spain*
[b] *Servicio de Reumatología, Hospital Universitari Dexeus-Grupo Quirón Salud, Barcelona, Spain*
[c] *Servicio de Reumatología, Hospital Ramón y Cajal, Madrid, Spain*
[d] *Servicio de Reumatología, Hospital Universitario Puerta de Hierro-Majadahonda, Majadahonda, Madrid, Spain*
[e] *Servicio de Reumatología, Hospital Universitario de Canarias, Canarias, Santa Cruz de Tenerife, Canarias, Spain*

* Corresponding author.
E-mail address: federico.diaz.gonzalez@gmail.com (F. Díaz-González).

2173-5743/

Median nerve ultrasound findings in systemic sclerosis patients: How do they relate to clinical features of the disease?

Hallazgos ecográficos del nervio mediano en pacientes con esclerosis sistémica: ¿cómo se comparan con aspectos clínicos de la enfermedad?

Dear editor,

Systemic sclerosis (SSc) is a rheumatic disease characterized by inflammation, vascular injury and fibrosis. Median nerve (MN) entrapment in the carpal tunnel (CT) seems to be frequent in patients with SSc[1,2]. Ultrasound (US) evaluation of MN in SSc patients was only performed in few studies and conclusions were not linear[3–5].

We aimed to compare specific MN US parameters between patients with SSc and a group of control subjects. Additionally, in the group of SSc patients, we also assessed the correlation between the US measurements and clinical variables of the disease. For this purpose, we conducted a cross-sectional study comprising 48 SSc patients, 39 females (81.3%), followed-up in our Rheumatology Unit with mean age of 56.98 ± 12.73 years and mean disease duration of 9.77 ± 6.12 years. The control group included 45 healthy subjects, 37 females (82.2%), paired for age (p=0.146) and gender (p=0.904). All individuals were Caucasian. Exclusion criteria were age <18 years, body mass index >30, previous wrist trauma or local corticosteroid injection.

Subjects were consecutively evaluated in our Department. MN cross-sectional area (MNA) and perimeter (MNP) of both sides of each person were measured at the level of the CT inlet in the transverse plane between the scaphoid tubercle and the pisiform bone. All measurements were performed by the same observer using a 15 MHz linear probe of a General Electric LOGIQ S8 US (image settings: frequency 15 MHz, gain 67 and depth 2.5 cm). Additionally, in the patients group, modified Rodnan skin score (mRSS), the hand mobility (HAMIS) and the SSc Severity Scale (SScSS) were also calculated. For simplification of comparative analysis, we present the results using the mean MNA and MNP of combined right and left sides. Statistical analysis included Chi-Square test, Mann-Whitney U-test, Kruskal-Wallis and Spearman correlation coefficient. Statistical significance was defined as P value <0.05. The study was performed following the Declaration of Helsinki principles and informed consent was obtained from all subjects.

We evaluated by US a total of 186 MN. Possible confounding variables as proportion of diabetes and CT surgery were similar between groups (p=0.803 and p=0.339, respectively). Median of MNA and MNP were significantly higher in SSc patients (7.5 mm^2 [6.6 to 9.5] and 13.8 mm [12.4 to 15], respectively) (median [interquartile range]) compared with controls (7.0 mm^2 [6 to 8] and 12.9 mm [11.7 to 14], respectively) (p=0.021 and p=0.018, respectively). Among SSc patients group, a positive correlation was found

Table 1
Median Nerve Area (MNA) and Median Nerve Perimeter (MNP) comparison between the 3 phases of skin involvement among Systemic Sclerosis patients.

	Edematous (n=22)	Fibrotic (n=24)	Atrophic (n=2)	p value
Median MNA (mm2)	9.25 [7.5 to 11.5]	7.25 [6.5 to 8.4]	7.25	<0.05
Median MNP (mm2)	14.5 [13.5 to 16.9]	13.4 [12.4 to 13.9]	12.8	<0.05

between mRSS and both MNA (Spearman's rho=0.335, p=0.02) and MNP values (rho=0.336, p=0.02). There was no correlation between MN US parameters and age, disease duration, HAMIS or SScSS. MNA and MNP were also similar in relation to gender and subset of disease (p>0.05). However, median of MNA and MNP were significantly different between the 3 phases of skin involvement, being higher in patients in the edematous phase (Table 1).

Our study showed an increased MNA and MNP in SSc patients in comparison with controls while few data available from previous studies yielded mixed results[3–5]. Contrarily to Bandinelli F et al[3] who did not find any correlation between MN US measurements and SSc clinical features, we found some interesting correlations. In our study, patients in the edematous phase of skin involvement and patients with higher skin thickness assessed by mRSS showed higher MNA and MNP values. The presence of tissue edema and thick skin may contribute as mechanical factors for MN entrapment in the CT. Larger studies are needed to draw definite conclusions.

References

1. Amaral TN, Peres FA, Lapa AT, Marques-Neto JF, Appenzeller S. Neurologic involvement in scleroderma: A systematic review. Semin Arthritis Rheum. 2013;43:335–47.
2. Morer IC, Marco JV, Aznar JLH, Lafita CA, Caballo RB, Juste AO. Manifestaciones neurológicas en la esclerosis sistémica. Rev Clin Esp. 2003;203:373–7.
3. Bandinelli F, Kaloudi O, Candelieri A, Conforti ML, Casale R, Cammarata S, et al. Early detection of median nerve syndrome at the carpal tunnel with high-resolution 18MHz ultrasonography in systemic sclerosis patients. Clin Exp Rheumatol. 2010;28:15–8.
4. Bignotti B, Ghio M, Panico N, Tagliafico G, Martinoli C, Tagliafico A. High-resolution ultrasound of peripheral nerves in systemic sclerosis: a pilot study of computer-aided quantitative assessment of nerve density. Skeletal Radiol. 2015;44:1761–7.
5. Tagliafico A, Panico N, Resmini E, Derchi LE, Ghio M, Martinoli C. The role of ultrasound imaging in the evaluation of peripheral nerve in systemic sclerosis (scleroderma). Eur J Radiol. 2011;77:377–82.

Joana Sousa-Neves,* Marcos Cerqueira, Carmo Afonso, Filipa Teixeira

Rheumatology Department, Conde de Bertiandos Hospital, Ponte de Lima, Portugal

* Corresponding author.
E-mail address: joanasvsneves@gmail.com (J. Sousa-Neves).

2173-5743/

Edema and Dermatomyositis. Migratory Edema and Edematous and Vesiculobullous Dermatomyositis Overlap☆

Edema y dermatomiositis. Edema migratorio y solapamiento de dermatomiositis edematosa y vesiculoampollosa

To the Editor,

Extrafacial edema is a rare manifestation of dermatomyositis (DM). We report 2 cases.

Case no. 1. The patient was an 86-year-old woman who was admitted with dysphagia, dyspnea, weakness in her 4 extremities (2/5) and edemas. Four years earlier, she had been diagnosed with cryptogenic organizing pneumonia detected by means of pulmonary function tests, imaging studies and histology. It was observed that, aside from periorbital edema, she had edema with fovea in upper and lower limbs. She had plaques with vesiculobullous eruption on her forearms and erythematous and edematous eruption on her thighs (Fig. 1). Biopsy of the thigh revealed epidermal atrophy, subepidermal bullous disease, necrotic keratinocytes, superficial perivascular infiltrate, mucin and dermal edema. Direct immunofluorescence was negative, as were tests for anti-Jo-1, anti-PL7, anti-PL12, anti-SRP-54, anti-Mi2, anti-Ku and anti-PM/Scl antibodies. Creatine kinase (CK) was 1267 U/L. Electromyogram demonstrated the myopathic changes and muscle biopsy revealed perifascicular atrophy and CD4 + perimysium and perivascular inflammatory infiltrate.

A cardiac origin of the edema was ruled out, as were renal, hepatic and thyroid origin. Albumin, after multiple hospital admissions for dyspnea, weakness and edemas, had decreased (2.5–3.2 g/dL) and reached normality after treatment with corticosteroids. Having reviewed her history, we finally discovered the diagnosis of her lung disease: an elevated CK level (1370 U/L). Computed tomography revealed a breast lesion that was found to be an infiltrating ductal carcinoma. She was treated with prednisone at a dose of 1 mg/kg body weight (bw)/day and 5 sessions of plasmapheresis. After mastectomy, dysphagia persisted and we detected a diffuse disseminated signet ring cell adenocarcinoma. She died 4 months later due to respiratory failure.

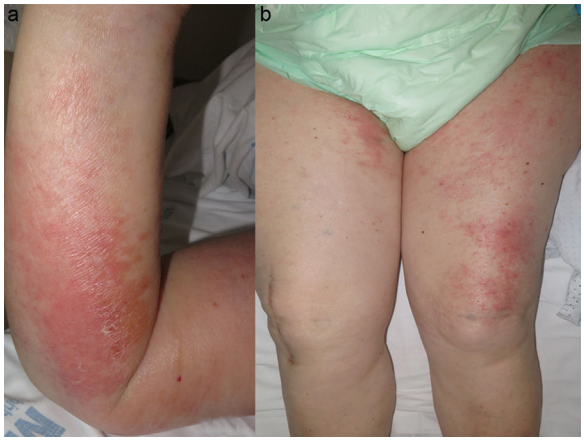

Fig. 1. (a) Erythematous and edematous plaque with superficial vasiculobullae in right upper limb. (b) Edema and erythematous and edematous plaques on thighs.

☆ Please cite this article as: Lozano-Masdemont B, Pulido-Pérez A, Parra-Blanco V, Avilés-Izquierdo JA. Edema y dermatomiositis. Edema migratorio y solapamiento de dermatomiositis edematosa y vesiculoampollosa. Reumatol Clin. 2018;14:313–314.