groups (69.4% and 75% respectively, p = 0.57). The diagnosis of SPDT was based either on a range of highly evocative clinical, biological and radiological arguments (71.2%) or on the disco-vertebral biopsy puncture (28.8%). Among the clinical arguments suggestive of tuberculous SPD were: progressive onset of symptoms in 47 patients (90.4%), segmental spinal stiffness in 37 patients (71.2%), spinal pain with general signs of tuberculosis such as impaired general condition, fever, night sweats and weight loss in 32 patients (61.5%). Lumbar spine involvement was the most common in tuberculous SPD (57.7%). A biological inflammatory syndrome has been objectified in 38 patients (73.1%). Imaging was contibutive to positive diagnosis using standard X-rays, computed tomography and magnetic resonance imaging. Disc pinch, erosion of vertebral plateaus and vertebral collapse were the major signs. The treatment was based on anti-tuberculosis drugs for at least nine months. Only four factors had an unfavourable predictive value ($p \leq 0.05$): Normochromic normocytic anemia observed in 53.8% of our patients (p = 0.018; Odds Ratio = 6.66), initial lymphocytosis (p = 0.048), fever in 36.5% of our patients (p = 0.01; Odds Ratio = 9.6) and standard X-ray vertebral compression in 67.3% of our cases (p = 0.001; Odds Ratio = 13).
Conclusion: Tuberculous spondylodiscitis is a frequent condition that needs to be diagnosed and treated rapidly. Poor prognosis factors have been identified to provide insight into disease progression.
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AB1483 ASSOCIATION BETWEEN THE DECREASE OF CAPILLAR DENSITY IN THE CAPILLAROSCOPY AND THE DIAGNOSIS OF SYSTEMIC SCLEROSIS PATIENTS WITH RAYNAUD

R. Rojas Tessel[1], E. Picco[1], E. Buschiazzo[1], M. Aciar[1], A. C. Ralle[1], N. Cucchiaro[1], V. Juarez[1], M. B. Lecumberri[1], D. Alonso[2], L. Ibañez Zurlo[3], J. Picchi[4], M. E. Crespo Espindola[1]. *[1]Hospital Sr del Milagro, Rheumatology, Salta, Argentina*; *[2]Punto Doc, Rheumatology, Salta, Argentina*; *[3]Instituto ALAS, Rheumatology, Salta, Argentina*; *[4]Cardiomed, Rheumatology, Salta, Argentina*

Background: Videocapillaroscopy (VC) has become a widely used tool due to its low cost, accessibility and no invasive nature. PANLAR study group proposes a semi-quantitative method to inform it, which includes four grades to categorize capillary density (methods). Previous studies found that capillary density is associated with microvascular damage, predicts disease progression and organ affection in systemic sclerosis (SSc) and can be useful as a follow-up tool (1-5).
Objectives: Describe the associations between the different patterns and grades of capillary density loss and the SSc diagnosis.
Methods: A cross sectional study was designed using clinical records, including outpatients attending to a VC consult between the March and October 2021. Descriptive data regarding patients demographics, presence of rheumatologic diagnosis and treatment was registered. The VC was performed by an experienced rheumatologist (RTR) (DinoLite), with a 200x amplification. Capillary density loss (CDL) was scored based on PANLAR recommendations: Grade 0 (no loss), Grade I (7-9 capillaries / lineal mm), Grade II (4-6 capillaries / lineal mm), Grade III (< 4 capillaries / lineal mm). Descriptive statistics were performed and data was compared using Student´s T test, Mann-Whitney, Chi2 or exact Fisher´s test depending on the type of data and its distribution. A p value < 0.05 was considered as significative.
Results: One hundred and one patients were included, 91 (91%) female, mean age 43 years (SD 13.9), 72 (71,3%) had raynaud phenomenon (RP), with a mean evolution of 1 year (IQR 0.5-3.5). Rheumatologic diagnosis was: 19 rheumatoid arthritis (RA), 16 SSc, 11 systemic lupus erythematosus (SLE) and 27 no diagnosis, including 2 with digital necrosis and one with endocarditis suspicion. VC was normal in 40 (39.6%) patients, 34 (33.7% had non-specific findings, and 26 (26%) SD pattern. In the latter, the pattern was 2 were early pattern, 11 active and 13 late. SD pattern was associated with SSc diagnosis, and the use RP medication (both p<0,001). Three patients with inflammatory idiopathic myopathy (IIM), 2 SLE, 2 primary sjögren syndrome (pSS) and 2 without diagnosis had also this pattern. LCD was found in 27% of the patients, and Grade III was associated with SSc diagnosis being 14 times more frequent compared with non-SSc. [Table 1]

Table 1. Capillary density loss presence and grades in SSc vs non-SSc

Variable	SSc	No-SSc	OR (95%CI)	p value
CDL – n (%)	12 (75)	15 (17.6)	14 (3.9-49.4)	0.0001
Grade I – n (%)	7 (8.2)	4 (25)	3.8 (0.9-14.6)	0.07
Grade II – n (%)	3 (18.8)	6 (7.1)	3 (0.6-13.8)	0.1
Grade III – n (%)	4 (25)	2 (2.4)	13.8 (2.2-83.8)	0.005

Ssc (systemic sclerosis), CDL (capillary density loss),

Conclusion: CDL was present in almost 1/3 of non selected patients attending to a VC study, and was strongly associated with SSc diagnosis. Future studies including this outcome can bring new data regarding microvascular damage and its implications.

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AB1484 THE SIGNIFICANCE OF ANTI-DFS70 ANTIBODIES IN HEALTHY POPULATION AS A MARKER OF EXCLUSION OF SYSTEMIC AUTOIMMUNE RHEUMATIC DISEASES

Z. Verizhnikova[1], V. Rybakova[1], A. Avdeeva[1], T. Panafidina[2], A. Lila[3], E. Nasonov[4]. *[1]V.A. Nasonova Research Institute of Rheumatology, Laboratory of Immunology and Molecular Biology of Rheumatic Diseases, Moscow, Russian Federation*; *[2]V.A. Nasonova Research Institute of Rheumatology, Department of Systemic Rheumatic Diseases, Moscow, Russian Federation*; *[3]V.A. Nasonova Research Institute of Rheumatology, Medical Academy of Continuing Professional Education, Rheumatology, Moscow, Russian Federation*; *[4]V.A. Nasonova Research Institute of Rheumatology, Scientific Department, Moscow, Russian Federation*

Background: The prevalence of anti-DFS70 antibodies in healthy volunteers (HV) by various methods ranges from 0 to 22% [1]. This pattern, which is rare in patients with systemic autoimmune rheumatic diseases (SARDs), has been described as the second most common in serum HV [2].
Objectives: To study the frequency of detection of anti-DFS70 in HV, patients (pts) with undifferentiated SARDs and systemic lupus erythematosus (SLE).
Methods: A total of 45 HV, 17 undifferentiated SARDs pts and 81 SLE pts were included in the study. Groups were comparable in gender and age among themselves. The diagnosis of SLE was performed according to the ACR/EULAR 2019 classification criteria. Serum samples were tested for anti-DFS70 (ANA HEp-2 ELITE/DFS70 knock-out IFA, "Trinity Biotech", Ireland). Fluorescence titers ≥1:160 were considered as positive for ANA HEp-2 cell patterns.
Results: Positive results of the ANA study were found in 81 (100.0%) pts with SLE, in 16 (94.0%) pts with undifferentiated SARDs and 7 (15.6%) HV (Table 1). Abs to DFS70 were isolated, detected in 4 (57.1%) HV, in 9 (56.2%) undifferentiated SARDs, but were not detected in SLE pts. Classical HEp-2 cell patterns (homogeneous AC-1, speckled AC-4.5, homogeneous+speckled AC-1,4,5, cytoplasmic AC-19,20,21) without anti-DFS70 were deficient in 3 (42.9%) HV, in 7 (43.8%) patients with undifferentiated SARDs and in 81 (100%) patients with SLE (Table 2). Therefore, monospecific anti-DFS70 were detected in the HV and undifferentiated SARDs groups, but were not detected in patients with a reliable diagnosis of SLE.

Table 1.
ANA-HEp-2/DFS70 KO detection rate

Groups of pts	n	ANA-HEp-2/DFS70 KO ≥ 1:160, n (%)
HV	45	7 (15.6)
SLE	81	81 (100.0)
Undifferentiated SARDs	17	16 (94.0)

Table 2.
Detection rate of patterns in ANA-HEp-2-positive pts

HEp-2 cell patterns	HV, n=7	SLE, n=81	Undifferentiated SARDs, n=16
Nuclear dense fine speckled - DFS70 (AC-2), n (%)	4 (57.1)	0 (0.0)	9 (56.2)
Nuclear homogeneous (AC-1), n (%)	0 (0.0)	26 (32.1)	0 (0.0)
Speckled (AC-4,5), n (%)	1 (14.3)	14 (17.3)	1 (6.2)
Nuclear homogeneous+speckled (AC-1,4,5), n (%)	2 (28.6)	35 (43.2)	3 (18.8)
Cytoplasmic (AC-19,20,21), n (%)	0 (0.0)	6 (7.4)	3 (18.8)

Conclusion: Monospecific anti-DFS70 can potentially be considered as a possible marker for the exclusion of SARDs and a sign of benign autoimmunity.

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AB1485 PATIENT-REPORTED OUTCOMES AND BIOMARKERS ASSOCIATED WITH THE CUTANEOUS DERMATOMYOSITIS AREA AND SEVERITY ACTIVITY (CDASI-A) SCORE IN A PHASE 2 CLINICAL TRIAL IN DERMATOMYOSITIS

J. Dan[1,2], J. Patel[1,2], G. Sprow[1,2], J. Concha[1,2], R. Feng[3], N. Kodali[1,2], T. Vazquez[1,2], D. Diaz[1,2], B. White[4], V. Werth[1,2]. [1]*Perelman School of Medicine at the University of Pennsylvania, Dermatology, Philadelphia, United States of America*; [2]*Corporal Michael J. Crescenz VA Medical Center, Dermatology, Philadelphia, United States of America*; [3]*Perelman School of Medicine at the University of Pennsylvania, Biostatistics and Epidemiology, Philadelphia, United States of America*; [4]*Corbus Pharmaceuticals, Inc., Corbus, Norwood, United States of America*

Background: Retrospective reviews of clinical databases from two sites have identified strong relationships between patient-reported outcomes and skin activity in dermatomyositis (DM), as measured by CDASI-A.[1,2] No studies validate these associations in a controlled setting. Additionally, the relationship between the PROMIS-29 Short Form and skin activity in DM has not been assessed. Previous investigations have demonstrated a correlation between IL-31 and itch in DM.[3] IFN-β and IFN-γ are known type I and II interferons, which are critical drivers of DM pathogenesis.[4]

Objectives: To assess correlations between CDASI-A, quality of life (QoL), and biomarkers of disease activity in a double-blind, randomized, placebo-controlled clinical trial.

Methods: Data were retrospectively collected from five visits of a Phase 2 trial evaluating Lenabasum, a cannabinoid receptor type 2 agonist. Quality of life assessments extracted from the trial included Patient Global Assessment (PtGA) scores, PROMIS domains, and Skindex domains. Skindex question 10, regarding itch, was included in the analysis as a separate domain. Physician Global Assessment scores were also evaluated. Additionally, biomarkers derived from skin samples via IHC/PCR collected at visits 1 and 6 were assessed for predictors of CDASI-A response and association with disease activity. Analysis used linear mixed effect models to account for within subject-variability and repeated measures, where applicable. Analysis was performed without regard to treatment arm, as our goal was to correlate CDASI, QoL, and biomarkers among all subjects.

Results: Data from 22 subjects with DM and a combined total of 110 visits were included. Biopsies were collected from 12 subjects. Improvement in CDASI-A significantly correlated with Skindex-S, Skindex-E, Skindex-F, Skindex-Itch, PtGA global skin, PtGA global skin, PtGA global skin, and PtGA global skin, with $p < 0.001$. Improvement in PROMIS social role ($p = 0.046$) correlated with improvement in CDASI-A. Worsening of PROMIS fatigue ($p = 0.019$) and pain ($p < 0.001$) correlated with improvement in CDASI-A. Decreases in PGA overall disease, PGA skin activity, and PGA global skin all correlated with improvement of CDASI-A ($p < 0.001$). Change in IL-31 protein area positively correlated with change in disease activity ($p = 0.047$). A positive relationship between changes in IFN-β and IFN-γ protein area and disease activity trended towards significance.

Conclusion: In accordance with previous investigations from our group, well-established measures of QoL correlated significantly with CDASI-A. These findings support that CDASI-A reflects both clinical and patient-reported aspects of skin disease and is an appropriate outcome in DM clinical trials. Additionally, Skindex and PtGA scores may better relate to skin activity as measured by the CDASI compared to PROMIS domains. IL-31, a cytokine previously associated with itch in DM,[3] correlated significantly with CDASI-A in our study. Trends for IFN-β and IFN-γ reduction with disease improvement support their role in the pathogenesis of DM. This study helps define patient-reported outcomes and biomarkers that may be informative in DM trials.

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AB1486 ASSESSMENT OF GLUCOCORTICOID-RELATED ADVERSE EVENTS BY THE GLUCOCORTICOID TOXICITY INDEX (GTI) IN RHEUMATIC PATIENTS

M. Bahap[1], E. Duran[2,3], A. B. Ekincioğlu[1], O. Karadag[2,3]. [1]*Hacettepe University School of Pharmacy, Department of Clinical Pharmacy, Ankara, Turkey*; [2]*Hacettepe University School of Medicine, Department of Internal Medicine, Division of Rheumatology, Ankara, Turkey*; [3]*Hacettepe University School of Medicine, Vasculitis Research Centre, Ankara, Turkey*

Background: Glucocorticoids (GCs) remain the mainstay treatment for several autoimmune and inflammatory diseases however, its long-term or high-dose usage also has many potential side effects. The glucocorticoid toxicity index (GTI) is a novel global monitoring tool (1) developed to systematically assess glucocorticoid-associated morbidity.

Objectives: To evaluate GC toxicity by using GTI in patients with rheumatoid arthritis (RA), systemic lupus erythematosus (SLE) and vasculitis receiving glucocorticoids.

Methods: This descriptive, cross-sectional study included patients who were admitted to the rheumatology clinic between January 2021 and December 2021, were diagnosed with RA, SLE or vasculitis and treated with GCs. A single measurement of GC toxicity was performed using the GTI for each patient. Baseline GTI consists of twelve domains that related to commonly recognized adverse events that result of cumulative GCs exposure: body mass index (BMI), glucose metabolism, blood pressure, lipids, GC-induced myopathy, bone mineral density, skin toxicity, neuropsychiatric effects, infection, ocular, gastrointestinal and endocrine toxicity. The total GTI score ranges from 0 to 538 depending on the increase in toxicity burden.

Results: The study included 85 patients (55.3% male) with a mean age of 47.5 (±16.0) years (Table 1). Twenty (23.5%) patients had BMI values ≥30 kg/m2 and 63% of the patients were either hypertensive or receiving medications for hypertension. While HbA1c was ≥5.7% in 30 (35.3%) patients, 17 (20.0%) patients had glycated hemoglobin (HbA1c) value of ≥5.7% despite antidiabetic medication. Low density lipoprotein cholesterol (LDL-C) value of 33 (39%) patients was not on target. The median (IQR) GTI score of the study patients was 73 (81.5). Only 10 patients had a score of 0 in the GTI assessment. GTI scores were not correlated with the cumulative steroid doses ($r=0.145$, $p=0.198$) however, age was strongly associated with GTI scores ($r=0.605$, $p<0.001$).

Table 1. Demographics, disease characteristics, and glucocorticoid toxicities of the patients

Characteristic¶	All patients (n=85)		
	RA (n=21)	SLE (n=14)	Vasculitis* (n=50)
Age (years), mean (±SD)	47.3 (±17.2)	36.4 (±11.0)	50.6 (±15.5)
Duration of disease (months)	12 (12.5)	16 (17.8)	14 (13.3)
Damage and activity indices	DAS-28=2.66 (2.1) HAQ=0.07 (0.4)	SLEDAI=4.0 (6.5) SLICC=0 (1.5)	BVAS**=0 (1.0) VDI=1.0 (1.0)
Cumulative methylprednisolone dose (mg)	1458 (1496.9)	4646 (9053.5)	5604 (5281.5)
GTI toxicity domain, n (%)	9 (42.8)	6 (42.8)	24 (48.0)
✓ BMI ≥27 kg/m^2	8 (38.1)	6 (42.9)	33 (68.8)
✓ HbA1c ≥5.7%	7 (33.3)	4 (28.6)	26 (53.0)
✓ Blood pressure >120/85	6 (28.5)	2 (14.2)	25 (51.0)
✓ LDL-C >target	4 (20.0)	0	11 (24.5)
✓Osteoporosis	2 (10.0)	2 (14.3)	13 (26.5)
✓ Skin toxicity	2 (10.0)	3 (21.4)	8 (16.3)
✓ Neuropsychiatric toxicity	2 (10.0)	0	6 (12.2)
✓ Ocular toxicity	2 (10.0)	0	5 (10.0)
✓ Gastrointestinal toxicity			
GTI score	65 (104.5)	44 (48.0)	87 (76)

¶ n (%), if otherwise specified; median (IQR) for numeric values other than ageGTI: Glucocorticoid toxicity index, RA: Rheumatoid arthritis, SLE: Systemic lupus erythematosus, BMI: Body mass index, HbA1c: Glycated hemoglobin, LDL-C: Low density lipoprotein cholesterol*Vasculitis patients include ANCA-associated vasculitis, Giant cell arteritis, Takayasu arteritis, Behcet's syndrome, Igg4-related disease, Polymyalgia rheumatica and Leukocytoplastic vasculitis patients.***BVAS value given only for ANCA-associated vasculitis (n=19)

Conclusion: Our study revealed the iceberg of glucocorticoid toxicities in patients with rheumatic disease. Usage of GTI would help management of these possible toxicities. Therefore, it is important to assess GC toxicity at regular intervals during ongoing treatment in order to detect potential differences in the GTI scores.

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