Results: The study was completed with 61 patients (108 hands). Extramedian symptoms were present in 31 patients (54 hands). Finger grip strength was lower, pain values evaluated with visual analogue scale were higher in these patients ($p<0.05$). There was no statistically significant difference in electrophysiological and ultrasonographic parameters between two groups.
Conclusions: These results suggest that extramedian spread in CTS patients is more related to central and peripheral sensitization than peripheral causes.
Disclosure of Interest: None declared
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AB1004 NOMENCLATURE ON MEDICAL, DIAGNOSTIC, AND THERAPEUTIC PROCEDURES IN RHEUMATOLOGY

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Background: One of the missions of the Spanish Society of Rheumatology (SER) is to provide professionals involved with the necessary tools to ensure a better care for patients suffering from a rheumatic disease. Up to now, there is no benchmark that quantifies the complexity of medical acts in this specialty. Therefore, there is a need to adopt a physician activity scale that would allow assessment of their professional activity and skills regarding patient care.
Objectives: To compile a nomeclature of medical, diagnostic, and therapeutic procedures in the field of rheumatology; and to establish a hierarchical classification system according to a complexity index.
Methods: A list of care, diagnostic, and therapeutic acts was compiled based on the nomenclature created by Drs Fernandez and Olive. The hierarchical classification system was based on the construction of a complexity index which was calculated by two factors: time of completion and degree of complexity of each act. Time of completion was stated according to the document "Standards of Process Time and Patient Care Quality" by Dr Alonso. The degree of complexity of each rheumatologic act was agreed thanks to a panel of experts using a Delphi technique in two rounds. Subsequently, it was validated against a questionnaire which was sent to the 1144 partners of SER via its web.
Results: The total of included acts was 54. The results obtained with the Delphi method tended to show a consensus of opinion (media $\sigma 2$ - $\sigma 1$=0.75–1.43=-0.68, media IQR2 – IQR1=0.8–1.9=-1.1). Furthermore, a validation of these results was carried out through a massive survey among the partners of SER. The survey results showed a high degree of agreement (at least 70.0 per cent of the partners agreed or strongly agreed with the complexity of each act).
The degree of complexity in successive visits was 100. In the query section for consultations, the highest scores were obtained by first visit to hospitalized patient (366) and home visit (369). Regarding diagnostic techniques, the highest scores were obtained with biopsies: bone (465), sural nerve (416), and synovial (380). Also worth mentionioning the scores obtained by ultrasound scan (204), capillarioscopy (113) and densitometry (112). Regarding therapeutic techniques, intra-articular injection under sedation in children obtained a score of 388; while intra-articular injection with ultrasound control obtained a score of 163. The clinical report of disability was agreed to have a score of 323, and the expert report obtained a score of 370.
Conclusions: This work has made it possible to create a nomenclature of 54 acts in Rheumatology where biopsies (bone, sural nerve, synovial), visits to hospitalized patients, home visits, infiltration under sedation in children, and expert reports are identified as the most complex acts. Musculoskeletal ultrasound is considered twice as complex as a successive visit, capillaroscopy, or bone densitometry. These results will make it possible to improve patient care and establish a solid and agreed foundation to negotiate the provision of public and private services.
Disclosure of Interest: None declared
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AB1005 HYPOTHYROID AND HYPERTHYROID STATUS WAS STRONGLY ASSOCIATED WITH MUSCULOSKELETAL ULTRASONOGRAPHIC ABNORMALITIES WITH ARTHRALGIA

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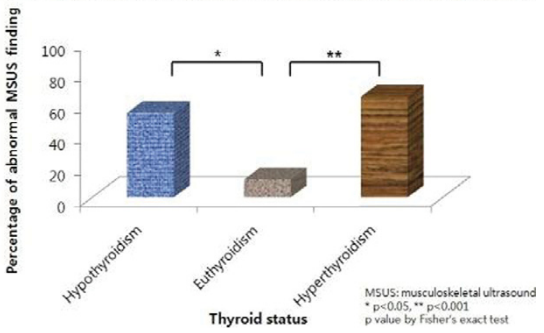
Background: Thyroid dysfunction can cause musculoskeletal symptoms and sign. Ultrasonography is a useful tool for the evaluation of synovitis and is more accurate than clinical examination.
Objectives: The purpose of the study was to determine whether musculoskeletal ultrasonographic (MSUS) abnormalities were observed according to the state of thyroid disease.
Methods: Patients with thyroid disease were categorized as euthyroid, hypothyroid, or hyperthyroid status according to thyroid hormone levels and evaluated the association with MSUS abnormalities. In addition, the association of the presence of thyroid autoantibodies with MSUS abnormalities was also studied. In MSUS, an experienced rheumatologist examined the presence of synovial fluid, synovial hypertrophy, and grade of power doppler in the knee joint.
Results:

Table 1. Patient characteristics

	Patients (n=109)
Age – mean ± SD (years)	58.2±13.0
Sex – n (%)	
Male	13 (11.9)
Female	96 (88.1)
Thyroid diseases duration – median (range), (years)	4 (0–13)
Distribution of thyroid diseases - n (%)	
Euthyroid status	61 (56)
Hypothyroid status	11 (10.1)
Hyperthyroid status	37 (33.9)
Positive thyroid autoantibodies – n (%)	68 (62.4)
Taking thyroid medication – n (%)	100 (91.7)
Patient's Knee VAS (100mm) – median (range)	10 (0–80)
MSUS finding – n (%)	
Normal	72 (66.1)
Abnormal	37 (33.9)

109 consecutive patients who visited the endocrinology outpatient clinic and had thyroid disease with normal or abnormal thyroid function tests participated in the study. MSUS abnormalities were statistically significantly higher in hyperthyroid or hypothyroid status than in euthyroid status ($p<0.001$). However, there was no statistically significant difference between hypothyroid status and hyperthyroid status. The presence of MSUS abnormalities with abnormal thyroid function was corrected according to the presence of radiological Knee osteoarthritis. Both hypothyroid and hyperthyroid status was still associated with MSUS abnormalities regardless of knee osteoarthritis. Visual analogue scale for knee pain was higher in patients with MSUS abnormalities ($p<0.001$). But, there was no statistically difference of MGUS abnormalities with presence of thyroid autoantibodies.

Figure 1. It shows frequency of Abnormal MSUS finding according to thyroid status



Conclusions: Both hypothyroid and hyperthyroid status was significantly associated with MSUS abnormalities with knee arthralgia. MSUS is a useful tool to detect clinically early joint abnormalities. We suggest that patients with diagnosed thyroid dysfunction and who remain uncontrolled, should assess the MSUS examination in patients with arthralgia. Moreover a thyroid function test for unexplained arthritis maybe warranted.
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AB1006 POWER-DOPPLER TECHNIQUE IN PAGET'S DISEASE OF BONE: A NEW MONITORING TOOL OF THERAPEUTIC RESPONSE. STUDY ON 43 PATIENTS

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Background: To date the evaluation of the disease activity and the monitoring of the therapeutic response of patients affected by Paget's disease of bone is based only on clinical and hematological data. However, in clinical practice the management of these patients is still challenging. Previous angiographic

and histological studies have revealed that the accelerated bone turnover is associated with an increased blood flow and hypervascularity, suggesting a role of high-resolution sonography with power-Doppler (PD) and color- Doppler (CD) in Paget's disease. Our preliminary data demonstrated that this technique shows not only the alterations of the pagetic bone profile, but also the hypervascularization of the osteoperiosteal-layer, both at the diagnosis and during follow-up.

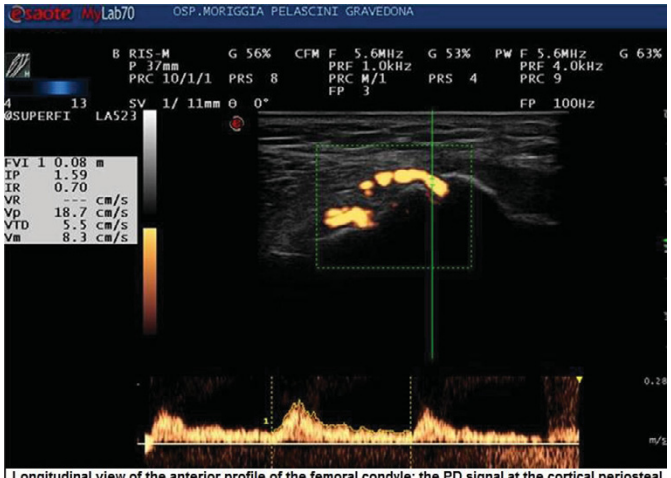
Objectives: To validate the PD technique as a useful tool not only for the diagnosis of Paget's disease of bone but also for the evaluation of the disease activity and for the monitoring of the therapeutic response.

Methods: Forty-three consecutive patients affected by Paget's disease of bone and treated with neridronate were followed up over the last ten years. Patients were classified in eight clinical patterns defined by the presence of bone alkaline phosphatase elevation over the normal range (BAP+), bone pagetic pain as visual analogue scale ≥30 (VAS+) and PD alterations of osteoperiosteal vascularization (PD+). Data were analyzed by Fisher exact test (two tails) to assess the associations between BAP+, VAS+ and PD+ at different times during follow up: before the start of the therapy, after the first, the second and the third neridronate cycle of therapy, and at the end of all cycles.

Results: At any time BAP+ and VAS+ were not associated. A trend of association between VAS+ and PD+ could be observed only after the first neridronate cycle. In contrast, the association between BAP+ and PD+ was statistically significant before the therapy, at the end of all cycles of therapy and after the second one, but not after the first one.

Table 1. Associations between BAP elevation over the normal range, VAS and PD alterations of osteoperiosteal vascularization, p<0.05

	BAP+/VAS+		BAP+/PD+		VAS+/PD+	
	n	P value	n	P value	n	P value
Before therapy	40	1.000	35	0.0063	35	0.5620
After first therapy cycle	40	0.6225	35	0.6176	35	0.0751
After second therapy cycle	22	0.4701	21	0.0263	21	1.000
After third therapy cycle	9	1.000	9	1.000	9	1.000
At the end of all therapy cycles	40	1.000	35	0.0290	35	1.000



Longitudinal view of the anterior profile of the femoral condyle: the PD signal at the cortical periosteal layer shows a systolic peak and a continuous diastolic flow with low-resistance index.

Conclusions: The lack of association between VAS+ and PD+ or BAP+ may be due to the difficulty of the patients in identifying and quantifying the pagetic pain, and suggests the weakness of the clinical criteria in defining the disease activity. Otherwise, PD technique proves to be a fast, reliable and not expensive tool, which is also very useful for monitoring/achieving better control of Paget's disease of bone.

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Disclosure of Interest: None declared

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AB1007 THE SLE-KEY® TEST DETECTS AN SLE SEROLOGIC SIGNATURE THAT PERSISTS OVER TIME AND IS INDEPENDENT OF DISEASE ACTIVITY

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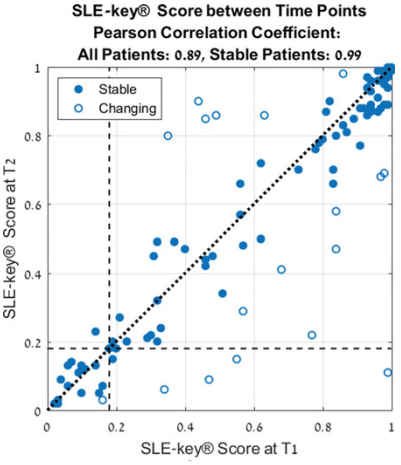
Background: We previously described the SLE-key® RuleOut test[1,2] to rule out the presence of systemic lupus erythematosus (SLE) with 94% sensitivity, 75% specificity, and 93% negative predictive value. We also reported that the SLE-key® signature appeared to be independent of disease activity or duration[3] suggesting[4] that that the SLE-key® signature might persist over time in the same subject.

Objectives: Here we report that the SLE-key® signature remains stable over time in paired samples drawn from most individual subjects, regardless of disease activity.

Methods: We determined the SLE-key® RuleOut scores for 113 paired serum samples submitted by clinics specializing in SLE. SLEDAI scores at the time of the blood draw ranged from 0 to 22. The mean SLEDAI difference within the pairs was 2.7±6.3. Samples were collected from subjects with a T1-T2 time difference that ranged from 0 to 11.5 years (mean =2±2.6 years).

Results: The SLE-Key® RuleOut test identifies an SLE-specific signature based on a profile of autoantibodies to a combination of nucleic acids (complex ssDNA and a defined oligonucleotide) and protein biomarkers. Patients with an SLE-key® score of >0.18 are considered not ruled out for a diagnosis of SLE. In 84% of paired samples, patients' SLE-key® scores remained essentially the same (Figure 1, closed circles). The scores for these subjects were stable, persistent, and independent of SLEDAI score or time between sampling. Significant changes in the SLE-key® scores of 18/113 patient pairs (open circles) appear to be independent of time between blood draws and change in SLEDAI score. In 7 cases there was a change in Rule Out status of the patients. In 3 cases, both scores were close to the 0.18 threshold and the change was deemed not significant. In 4 cases, patients' status changed from RuledOut to Not Ruled Out, but with no correlation to change in SLEDAI score or time between sampling dates. Records of patients with changing SLE-key® scores are being studied to determine the reasons and the clinical implications of the change.



Conclusions: The SLE-key® RuleOut test detects a serologic signature which remains stable between sampling dates and over a long period of time after diagnosis in 84% of subjects. Subjects who were ruled out at T1 were generally ruled out at T2. Patients not ruled out at T1 remained not ruled out at T2. The clinical implications of a changing SLE-key® RuleOut score in the remaining 16% of patients may be meaningful, and are currently being carefully investigated.

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Disclosure of Interest: C. Putterman Consultant for: ImmunArray, M. Petri: None declared, R. Caricchio: None declared, P. Safer Employee of: ImmunArray, K. Jakobi Employee of: ImmunArray, R. Sorek Employee of: ImmunArray, I. Gluzman Employee of: ImmunArray, S. Wallace Employee of: ImmunArray, I. Cohen Shareholder of: ImmunArray, Consultant for: ImmunArray

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AB1008 DISTRIBUTIONS OF ANTIBODIES IN SLE PATIENTS IN DIFFERENT ETHNIC GROUPS IN XINJIANG

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Objectives: The aim of this study was to explore distributions of antibodies in SLE patients in different ethnic groups in xinjiang.