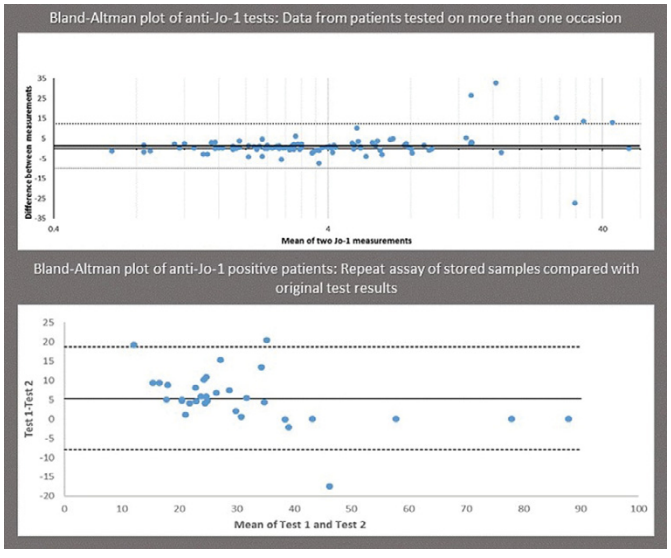
Objectives: To describe: the pattern of anti-ENA positive tests; frequency of repeated requests; stability and repeatability of anti-Jo-1 tests; clinical characteristics of anti-Jo-1 +ves compared with controls; and diagnostic value of anti-Jo-1 for ILD.
Methods: All anti-ENA test requests, from any hospital department, between Jan 2013 and Dec 2014 were identified. Serum samples are screened for ENA (Quanta Lite® ENA profile, Inova Diagnostics) and positive samples have specific ENA antibodies levels quantified. Data from anti-Jo-1 positive patients and controls was extracted from electronic records allowing a minimum of 12 months after first test.
Results:

	Jo-1 Positive (n=40)	Controls (n=80)	P value*
Age, mean years (range)	53 (19–86)	52 (17–87)	–
Sex (% female)	70%	79%	0.37
Dead	13%	4%	0.12
Current or previous malignancy	10%	10%	1.0
Raynauds	17.5%	6.3%	0.10
Inflammatory arthritis	20%	19%	1.0
Clinical myositis diagnosis	5%	1.3%	0.26
CPK >1000 units/liter	5%	1.3%	0.26
Interstitial lung disease	12.5%	6%	0.30
CT chest done during study period	17/40	20/80	0.06
ANA (≥1:100)	18/38 (47.4%)	22/79 (27.8%)	0.06
RF	8/25 (32%)	12/44 (27.3%)	0.78
CCP	0/19 (0%)	3/33 (9.1%)	0.54
Anti-dsDNA (Crithidia +ve)	7.5%	1.3%	0.11
Scl70	7.5%	0%	**
SSA/Ro	10%	0%	**
SSB/La	10%	0%	**
RNP	10%	0%	**

*Fisher's exact test, two tailed. **Statistical analyses were not done on these comparisons as by definition controls were negative for ENA antibodies.

4009 samples from 3581 patients were tested. The first sample tested, chronologically, was designated test of interest. 616 (17.2%) patients were anti-ENA screen +ve, and 40 (1.1%) anti-Jo-1 +ve (>20 AU/mL). Anti-ENA tests were done more than once for 350/3581 (9.8%) patients (428/4009 (10.7%) samples) and for 7/40 (17.5%) of anti-Jo-1 +ve patients. The median interval between 1st and 2nd requests: 124 days (IQR 233 days). The Table shows data for anti-Jo-1 patients and randomly selected ENA -ve controls. The frequency of ILD, myositis and Raynaud's was comparable. Sensitivity and specificity of Jo-1 for ILD, a key feature of "anti-synthetase syndrome", were 50% (CI 19–81%) and 68% (CI 59–77%) respectively. Positive predictive value 12.5% (CI 4 to 27%) and negative predictive value 93.8% (CI 86–98%). Of patients with the highest anti-Jo1 titres (≥40 AU/mL, 10/40 patients, 25%): 3 had ILD, 1 myositis and 2 had a malignancy (disseminated melanoma and CML). Bland-Altman plots show that anti-Jo-1 values remained stable when patients were re-tested at another time but re-testing available stored samples from +ve patients showed important variation (Figure).



Conclusions: Anti-Jo-1 is uncommon in a heterogenous hospital population and is only weakly predictive for ILD. When tested repeatedly levels remain stable over many months. Repeated testing for anti-ENA is common and potentially unnecessary. Controls over repeated requests could yield cost savings.
Disclosure of Interest: None declared
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AB1050 COMPARATIVE STUDY BETWEEN ULTRASONOGRAPHIC ASSESSMENT AND CLINICAL EXAMINATION IN RHEUMATOID ARTHRITIS WITH OPTIMIZED BIOLOGICAL THERAPY AND NON BIOLOGICAL TREATMENT

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Background: In rheumatoid arthritis (RA), patients in low activity disease or clinical remission measured by disease activity indexs can present subclinical activity by ultrasound study. The ultrasonographic inflammation in examination of joints is an important predictive value of structural damage.
Objectives: The aim of our study was to describe subclinical ultrasonographics activity in patients with RA in low disease activity or clinical remission, with optimized biological therapy and non biological treatment.
Methods: Transversal and longitudinal study describing the ultrasonographic changes in gray scale and doppler in parallel with blind clinical evaluation. We included patients with RA according to ACR/EULAR classification criteria in low activity disease or remission measured by DAS28, under optimized biological therapy at least for 6 months and non biological treatment. They were sent by their usual clinician, making a random selection. They were evaluated in the same day by a rheumatologist and blind sonographer. VAS, VGP, VGM, HAQ, tender joints count, swollen joint count, CDAI, SDAI and DAS28 were evaluated. Regarding the ultrasound, were evaluated synovitis and doppler in 12 joints (wrists, second to fifth MCF and fifth bilateral MTF). The comparison between clinical examination and ultrasonography test was performed by the kappa index, with satisfactory value of >0,6.
Results: A total of 69 patients were included, 35 with optimized biological therapy and 34 non biological treatment. The median optimization time was 12 months. The baseline characteristics only offered stadistical significance in swollen joint count and average time of disease (table 1).
The concordance study between clinical joint exploration and ultrasonographic examination showed a higher kappa index in patients with optimized biological therapy: 0,52 in gray scale and 0,40 in doppler. In patients without biological therapy showed an index kappa =0.17 by the gray scale test, and kappa index =0.26 by doppler.

Table 1

Variable characteristics	Non biological treatment	Optimized biological therapy	p
Age: average ± DE (years)	53,8±10	54±11,7	0,834
Women (%)	73,5	65,7	0,498
Time of diseases progression: median (p25-p75) (months)	55 (34–116)	120 (84–139)	0,003
Rheumatoid factor + (%)	71,3	81,80%	0,544
Anti CCP + (%)	71,4	81,7	0,512
Metotrexate dose: average ± DE	9,0±1,3	8,1±1,4	0,658
Corticoids dose: average ± DE	1,7±0,4	1,5±0,4	0,856
HAQ: average ± DE	1,0±0,2	1,3±0,2	0,309
Tender joint count: median (p25-p75)	0 (0–1,5)	1 (0–2)	0,200
Swollen joint count: median (p25-p75)	0 (0–1)	1 (0–2)	0,013
CDAI: average ± DE	7,7±5,1	6,8±5	0,437
SDAI: average ± DE	10,0±5,6	10,0±6,5	0,588

Conclusions: Our results show the existing discrepancy between the clinical examination and ultrasonographic test in patients in low disease activity/remission by DAS28, even more with the use of doppler. In the comparison of both groups we observed an increase in the difference in those who did not receive biological therapy. In patients with optimized biological teraphy, with higher swollen joint count in physical examination, kappa index was near of normality in grayscale. The detection of subclinical joint damage is often undertreated, showing ultrasound as a noninvasive technique of great help reducing joint damage.
Disclosure of Interest: None declared
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AB1051 ULTRASONOGRAPHY AND POWER DOPPLER ULTRASONOGRAPHY OF KNEE JOINT IN PATIENTS WITH HEPATITIS C VIRUS RELATED ARTHRITIS

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Background: HCV is a hepato-lymphotropic virus. Chronic arthritis is one of its extrahepatic manifestations[1]. The high frequency of rheumatoid factor (RF) positivity in HCV patients makes it difficult to differentiate between rheumatoid arthritis (RA) and HCV-related arthritis (HCVrA). An accurate and early diagnosis of HCVrA is important to avoid unnecessary immunosuppressive therapy[2]. Ultrasonography provides safe and quick access for the diagnosis of many rheumatic diseases.
Objectives: To illustrate ultrasonographic findings obtained in knee joints of patients with HCVrA & to compare these findings with those obtained from knee joints of RA patients.