TABLE

	PMR patients (n=75)	Steroid-naïve patients (n=14)	Steroid-resistant patients (n=61)	P#
Sex (women), n (%)	48 (64.0)	7 (50.0)	41 (67.2)	0.23
Age (years), mean $\pm$ SD	68.2 $\pm$ 10.7	65.5 $\pm$ 11.4	69.9 $\pm$ 10.5	0.29
ESR (mm/1 st h), median [IQR]	41.0 [24.0-68.0]	43.5 [23.3-68.5]	41.0 [24.0-66.5]	0.92
CRP (mg/dL), median [IQR]	1.3 [0.7-3.6]	1.6 [0.6-7.8]	1.3 [0.5-3.5]	0.77
F-FDG uptake				
Shoulders	45 (60.0)	9 (64.3)	36 (59.0)	0.72
Sternoclavicular joints	33 (44.0)	7 (50.0)	26 (42.6)	0.62
Hips	32 (42.7)	6 (57.1)	24 (39.3)	0.23
Cervical interspinous bursae	9 (12.0)	2 (14.3)	7 (11.5)	0.77
Lumbar interspinous bursae	29 (38.7)	4 (28.6)	25 (41.0)	0.40
Pubic symphysis	4 (5.3)	2 (14.3)	2 (3.3)	0.16
Subtrochanteric bursae	20 (26.7)	3 (21.4)	17 (27.9)	0.62
Iscial tuberosities	19 (25.3)	2 (14.3)	17 (27.9)	0.30
Knees	33 (44.0)	7 (50.0)	26 (42.6)	0.62
LTV	51 (68.0)	13 (92.9)	38 (62.3)	0.027

Comparisons between steroid-naïve patients and patients receiving corticosteroids

Conclusion: Vascular ¹⁸F-FDG uptake detection was higher in PMR patients with LTV suspicion who had never received GC. However, PET/CT was also useful to detect vascular involvement in most of the patients under a long-term medium-dose steroid treatment.

REFERENCE:

- [1] D. Prieto-Peña, I. Martínez-Rodríguez, J. Loricera, et al. Predictors of positive (18)F-FDG PET/CT-scan for large vessel vasculitis in patients with persistent polymyalgia rheumatica. *Semin Arthritis Rheum*; 2018): Doi: 10.1016/j.semarthrit.2018.05.007. [Epub ahead of print]

Disclosure of Interests: D. Prieto-Peña: None declared, Monica Calderón-Goercke: None declared, Isabel Martínez-Rodríguez: None declared, Jose Ignacio Banzo: None declared, Miguel A González-Gay Grant/research support from: Prof. MA Gonzalez-Gay received grants/research supports from Abbvie, MSD, Jansen and Roche., Speakers bureau: Consultation fees/participation in company sponsored speaker's bureau from Pfizer, Lilly, Sobi, Celgene, Novartis, Roche and Sanofi., Ricardo Blanco Grant/research support from: Abbvie, MSD, and Roche, Consultant for: Abbvie, Pfizer, Roche, Bristol-Myers, Janssen, Speakers bureau: Abbvie, Pfizer, Roche, Bristol-Myers, Janssen

DOI: 10.1136/annrheumdis-2019-eular.3619

FRI0647

COST-EFFECTIVENESS OF RHEUMATOLOGY ULTRASOUND: RETROSPECTIVE AUDIT OF THE AINTREE ULTRASOUND CLINIC

Laura Ranieri^{1,2,3}, Robert N. Thompson⁴, Jagdish N. Rair⁴, Cristina Estrach⁴.

¹Hospital General Alicante, Alicante, Spain; ²Fundación Española Reumatología, Spain, Spain; ³Fundación Valenciana de Reumatología, Valencia, Spain; ⁴Aintree Hospital Liverpool, Liverpool, United Kingdom

Background: Ultrasound is useful to guide escalation of synthetic disease-modifying antirheumatic drugs (sDMARDs) and optimization of biologic DMARD therapy (bDMARDs) in inflammatory arthritis. However, there is limited published evidence of the cost effectiveness of the use of ultrasound in selecting patients for treatment tapering or escalation avoidance [1].

Objectives: To evaluate the usefulness of a Rheumatology-led Ultrasound Clinic.

Methods: Retrospective descriptive analysis of patients evaluated in the Aintree Ultrasound Clinic between January and September 2018. Our Ultrasound Clinic runs once a week and the scans are performed by expert rheumatologists (2 EFSUMB level 3, 1 advance EULAR level). Patients can be referred by specialist nurses or by other rheumatologists. Synovitis is assessed following EULAR/OMERACT guidelines.

Results: 113 patients were analysed and 10 patients were excluded (7 did not attend and 3 excluded due to not enough information available). The mean time from referral to ultrasound was 48.17 days (SD 20.21). Forty seven patients (42%) were referred by a doctor and 65 patients (58%) by a specialist nurse. Rheumatoid arthritis was the most frequent diagnosis with 74 patients (66%), other inflammatory arthritis in 23 patients (23%) and other non inflammatory conditions in 16 patients (14%). The indication for scan was to exclude subclinical inflammation (n=91, 81%), to exclude inflammatory arthritis (n=15, 13%) with not clear referral question in 7 patients (6%). The ultrasound was positive for inflammation (defined as $\geq$ power doppler OMERACT grade 2 in at least 1 joint) in 37 patients (33%) all of whom had

their treatment changed: sDMARD escalation (n=10), initiation bDMARD (n= 4), change of bDMARD(n=2) and steroid therapy (intraarticular or intramuscular injection) the same day of the scan (n= 28). Fifty eight patients were on sDMARD treatment: 14 patients had a change in treatment based on the scan (4 patients started biologic drugs, 10 patients had sDMARD escalation). There was no change of treatment in 44 patients, 7 of whom were being considered for bDMARDs before scan. Three of the 29 patients on bDMARD had a change of treatment based on the scan (2 changed to other biologic, in 1 patient another sDMARD was added). Steroids were administered the same day of the scan to 28 patients (intraarticular injection 10; intramuscular injection 18).

Conclusion: Ultrasound altered our management in most patients (n=108, 96%). Avoiding escalation to biologics in 7 patients who met clinical criteria saved an estimate of £35,000. We conclude that point of care ultrasound in patients with inflammatory arthritis is cost effective, not only in saving unnecessary escalation to high cost drugs but by prompt treatment of those with active disease.

REFERENCES:

- [1] Simpson E, Hock E, Stevenson M, Wong R, Dracup N, Wailoo A, et al. What is the added value of ultrasound joint examination for monitoring synovitis in rheumatoid arthritis and can it be used to guide treatment decisions? A systematic review and cost-effectiveness analysis. *Health Technol Assess* 2018;22(20).

Disclosure of Interests: None declared

DOI: 10.1136/annrheumdis-2019-eular.3124

FRI0648

USEFULNESS OF THE ULTRASOUND IN THE DECISION-MAKING PROCESS ABOUT THE USE OF BIOLOGICALS IN PATIENTS WITH RHEUMATOID ARTHRITIS – EXPERIENCE OF REAL LIFE IN A MIDDLE INCOME COUNTRY

Edwin Castillo¹, Michael Cabrera², Diana Buitrago-Garcia³, Pedro Santos-Moreno¹, Eva Cardozo¹, Ivania Ramirez¹, Danny Gomez¹, Sandra Farietta¹.

¹Biomab – Center for rheumatoid arthritis, Rheumatology, Bogotá, Colombia;

²Biomab – Center for rheumatoid arthritis, EHR administration, Bogotá, Colombia;

³Biomab – Center for rheumatoid arthritis, Nursing research, Bogotá, Colombia

Background: Rheumatoid arthritis (RA) is an inflammatory autoimmune disease with a prevalence of 0.5 to 1% and the advances in pharmacological treatments offered to manage the disease have achieved many goals; however, the appearance of biologics has made the treatment of RA very costly, which has a great impact in the developing countries where accessibility to these therapies is lower. On the other hand, we now know that patients who are in clinical remission of disease activity by clinimetry in a significant percentage of cases may have the so-called subclinical activity that is found using ultrasound (US).

Objectives: To evaluate the usefulness of ultrasound within the component of evaluation of patients with moderate-severe activity of the disease before they are taken to a medical board making-decision process about the initiation or switching of biologics.

Methods: Once a rheumatologist has identified a patient RA with clinical indication for biological therapy, patient is sent, among other things, to a medical board to take a collegiate decision about beginning or switching of biologic therapy. Between 24 and 72 hours before the medical board decision, the patient undergoes an US (normally 12 joints are measured plus those clinically committed at that time), in order to determine if it presents disease activity by US which is considered negative for activity if the patient has synovitis $\leq$ 1 or has Power Doppler $\leq$ 1 in a single joint.

Results: During 12 months, 988 patients had clinical indication for using biologic based on moderate or high disease activity; they were evaluated by a multidisciplinary team to define the appropriateness of a therapy; mean DAS28 of patients was 4.81 ± 1.37 ; Once the patients were evaluated by US, the medical board of decisions did not in all cases decide to initiate or change a biological treatment; the choices made by the team were: 30% initiated or re-initiated biological therapy, in 29% of cases the team decided to wait and continuing observing the patient, 22% were switched to other biologic therapies, 12% did not have indication to start biological therapy because no activity by US and in 5% the medication dose was adjusted. Thus, in a total of 41% of the patients, biological therapy was not started or changed, which is important from the point of view not only clinical but also of the health payers.