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P012 - CLINICAL AND ULTRASONOGRAPHIC RESPONSE TO SUBCUTANEOUS METHOTREXATE IN EARLY RHEUMATOID ARTHRITIS. PRELIMINARY RESULTS

A.M. Anzola Alfaro, L.R. Caballero Motta, L.A Torrens Cid, C. Y. Soleto, B. Serrano Benavente, I. Janta, J. Molina Collada, C.M. Fernández, I. Monteagudo, J.M. Álvaro-Gracia and J.C. Nieto

Hospital General Universitario Gregorio Marañón. Madrid.

Resumen

Objectives: To describe the clinical and ultrasound response to methotrexate (MTX) during the first 6 months of treatment in early Rheumatoid Arthritis (RA) patients who started subcutaneous methotrexate (MTX-SC) as the first disease-modifying drug (DMARD).

Methods: Ongoing prospective cohort of patients with early RA according to ACR-EULAR 2010 criteria, over 18 years and starting MTX-SC by their treating rheumatologist. Patients had a clinical and ultrasonographic evaluation at baseline, 1, 3 and 6 months. We collected demographic data, C-reactive protein [CRP], erythrocyte sedimentation rate [ESR], rheumatoid factor [FR], anti-citrullinated protein antibody [ACPA]), inflammatory activity indexes (DAS28esr and DAS28crp) and EULAR's response to treatment (defined as a delta value of -1.2 in DAS28 scores). The ultrasonographic examination was performed in joints, tendons and bone erosions locations bilaterally. The joints explored were elbows and wrist (radio-carpal and inter-carpal joint) counted as a single joint, 1st to 5th metacarpophalangeal (MCF), proximal interphalangeal (IFP), knees, tibio-talar and subtalar joints and from the 2nd to the 5th metatarsophalangeal (MTF) joints. Bone erosions were evaluated in the 2nd and 5th MCF, styloid and distal ulna and the 5th MTF. Synovitis and tenosynovitis were graduated semi-quantitatively from 0 to 3 following OMERACT. Total synovitis was calculated on B mode and Doppler mode.

Results: 35 patients were included (mean age 61.2 years, 65.7% women) with a mean of 0.3 (± 8) months delay between symptoms and diagnosis. 34 patients (97.1%) started 15 mg per week of MTX-SC. A slightly higher DAS28esr was found in baseline data for one group (Table 1). After the first month, a significant response was achieved in 13 (41%) patients and remission in 11 (35%) (Table 2). 17 patients have 6th month data. 11 (64.7%) have achieved EULAR response compared to baseline (p = 0.0005) out of which 7 (54.5%) had already reached EULAR response by month 1. No significant differences were found between month 1 and 6 in disease activity; only a slight difference in MTX dose (month1 14.8 vs month 6 17.1, p = 0.003). Comparing the ultrasonographic baseline data; 8 patients (22.9%) already had erosions, with a mean of 2.75 erosions per patient (22 of the 280 possible locations). During the follow up the global rating lowered, with no differences in B mode, but with significant differences in Doppler mode at the 6 month mark (Table 3). At the cut of this report, 10 patients (28.5%) had stopped MTX treatment due to lack on response or adverse effects and 8 (22.9%) are waiting 6th month evaluation.

Table 1. Baseline patient data

	Month 1 response	No month 1 response	Total	p
Patients (%)	13 (41.9)	18 (58.1)	31	
Women (%)	8 (61.5)	12 (66.67)	20 (64.5)	0.76
MTX Dose mg (SD)	15 (± 0)	14.7 (± 1.2)		0.33
Prednisone Dose mg (SD)	6.8 (± 8)	5.2 (± 5.2)		0.55
DAS28crp (SD)	4.8 (± 1.5)	3.9 (± 1.3)		0.17
DAS28esr (SD)	5.5 (± 1.3)	4.2 (± 1.3)		0.01
ACPA (%)	8 (61.5)	15 (83.3)	23 (74.2)	0.17
RF (%)	10 (76.9)	8 (44.4)	18 (58)	0.07

Table 2. Baseline vs month 1

	Baseline	Month 1	p
EULAR response	0	13 (41)	0.00005
MTX Dose mg (SD)	14.8 (± 0.8)	14.8 (± 1.6)	1
Prednisone Dose mg (SD)	5.9 (± 6.5)	2.9 (± 3)	0.02
DAS28crp (SD)	4.3 (± 1.5)	3.4 (± 1.4)	0.02
DAS28esr (SD)	(4.8 (± 1.5)	3.7 (± 1.4)	0.006
Remission (DAS28 < 1.2)	3 (9.6)	11 (35.5)	0.04

Table 3. Ultrasound synovitis global rating

	Baseline	1 month	3 months	6 months
	N = 35	N = 31	N = 25	N = 17
B Mode: Medium (interquartile range)	8 (3.5-12)	8 (3-12.5)	6 (4-11)	5 (2-11) p 0.16
Doppler Mode: Medium (interquartile range)	2 (0.5-6)	2 (0-6)	2 (0-6)	0 (0-2) p 0.005

Conclusions: MTX is usually first treatment of RA. In this cohort, we found that half the patients that responded to treatment had achieved this by month 1. A higher inflammatory profile made response more likely. It seems little difference is found between month 1 and 6 of treatment on clinical data, however ultrasonographic results suggest that at least 6 months are needed for Doppler improvement. Perhaps MTX has a faster effect over joint pain and lowers DAS28 scores, however it requires longer to completely suppress inflammatory activity.