

Rheumatoid arthritis in Lebanese patients: characteristics in a tertiary referral centre in Beirut city

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Key words:

Rheumatoid arthritis, severity, Lebanon, referral centre

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Rheumatoid arthritis (RA) is a worldwide inflammatory joint disease with variable degrees of joint damage and extra articular manifestations (EAMs). Several studies have shown a less severe disease with less EAMs in Mediterranean countries than in other geographic areas.[1][2][3] In Lebanon, there is no reliable data on its characteristics. Since differences in the clinical features induce different practice guidelines, it is necessary to assess our population. We describe herein the disease in a cohort of rheumatoid arthritis Lebanese patients in our tertiary university hospital in the capital, Beirut.

We identified 97 RA patients, above the age of 18, in the outpatient clinics of the Rheumatology department over a one-year period, starting March 2001. They all fulfilled the 1987 American College of Rheumatology revised criteria.[4] All patients were evaluated according to a standardized data collection form, including demographic variables and disease history with clinical, biological and radiological features, as well as details of treatment. Since RA severity does not have a widely accepted definition, we assessed our patients according to the following criteria:

- The Disease Activity Score 28 (DAS28).[5]
- The presence of typical radiological lesions as defined by the 1987 ACR revised criteria in both hands and wrists in recent radiographs (within one year).[4]
- The presence of total joint replacement surgery because of arthritic changes.
- The modified version of the health assessment questionnaire (MHAQ).[6]
- The presence of any EAM: nodules, vasculitis or Felty's syndrome.

Demographic and clinical features were in concordance with other Mediterranean countries (see table1). Ten percent of the patients were over 70 years and 25.7% had less than 2 years disease duration. The disease was active (DAS28>3.2) in 59% of the patients and highly active (DAS28>5.1) in 14.4%. Eight patients were in remission according to the DAS28 (<2.6)[5] and 1 according to the ACR criteria.[7] Radiographic damage was present in 74 patients (76.2%) with a mean (SD) Larsen score of 43.77 (34.86) on a scale of 0 to 170 in 34 joints of the hands (grade 0-5). Eleven patients underwent total joint replacement surgery because of RA since the onset of their disease. The only observed EAM was subcutaneous nodules in 17 (17.5%) patients. Since the onset of the disease, all patients had used disease-modifying antirheumatic drugs (DMARDs) with two or more in 59.7%; 97.9% were currently treated by DMARDs, with Methothrexate in 51.5% (mean dose of 13.7mg/week), antimalarials in 31.9% and Leflunomide in 23.7%.

This is the first study in an Arabic Mediterranean country, assessing the characteristics of what are, a priori, the most severe cases of RA in our country and especially in the greater Beirut area, as they were recruited from a tertiary university referral center in the capital, an accessible referent city for Lebanese people living throughout our small country. Moreover, our data confirm the milder nature of the disease in an eastern Mediterranean country when compared to Northern Europe even though this comparison is difficult in the absence of adjustments (table 1). A concern in our cohort is the relatively recent disease (shorter than 2 years in 25.7% of the patients), which may have led us to under evaluate the frequency of EAMs.

In conclusion, even though RA seen in our hospital has a benign systemic expression and a rather mild disability, it is a destructive disease despite the widespread use of DMARDs. This is an important feature in discussing the use of newly and more aggressive disease suppressing therapy, in the light of its high cost and the lack of a universal third-party payer in our country. As the current study reflects the most severe Lebanese RA patients, another one evaluating the disease throughout Lebanon, called the SEVERA study (Severity of RA in the Lebanese population), is in progress.

Table 1 Comparison of rheumatoid arthritis characteristics across Mediterranean countries and Northern European ones.

	Lebanon (current survey)	Greece[1]	Italy [8][9]	Spain[3]	France[10]	UK [1]	Norway [2]	Lithuania[2]
Patient's number	97	108	200	788	1109	107	201	201
Mean age (years)	52.2		55.3	61	56.7		55.9	55.9
Sex (% women)	86.5		81	71.3	77.3		83	83
Mean disease duration (years)	9.2		12.5	10	10.6		12.7	11.9
Mean No of tender joints	6.89	6.8		3	7.2	15	6.6	12.6
Mean No of swollen joints	4.41	4		4	4.9	8.9	7.8	4.7
Mean DAS28 score (SD)	3.62(1.03)			3.4 (1.2)	4.51 (1.55)		4.4 (1.4)	5.3 (1.0)
% Patients with typical lesions	76.2	63	84		78	95		
Mean HAQ score (SD)			1.71	1.6 (0.4)	1.32 (0.77)			
Mean MHAQ score (SD) [scale]	0.66 (0.47) [0-3]						1.6 (0.5) [1-4]	2.3 (0.8) [1-4]
% Patients with EAMs	17.5	20.4	40.9	36.2	8.4	65-71	62	59
% Patients ever receiving DMARDs	100		89				90	94
% Patients currently receiving DMARDs	97.9			72	82.1			
% Patients receiving oral steroids	65.9		75		72			

DAS28, 28 joint disease activity score; HAQ, health assessment questionnaire score; MHAQ, modified health assessment questionnaire score; EAMs, extra-articular manifestations; DMARD, disease modifying antirheumatic drug.

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