Elderly onset rheumatoid arthritis: Clinical aspects

G. Bajocchi, R. La Corte, A. Locaputo, M. Govoni, F. Trotta

Rheumatic Disease Unit, Azienda Ospedaliera S. Anna, Ferrara, Italy.

Please address correspondence and reprint requests to: Dr. Francesco Trotta, Divisione di Reumatologia, Ospedale Sant'Anna, 44100 Ferrara, Italy.
E-mail: trf@dns.unife.it

Clin Exp Rheumatol 2000; 18 (Suppl. 20): S49-S50.

Key words: Rheumatoid arthritis, elderly onset.

ABSTRACT

The presentation, severity and prognosis of rheumatoid arthritis (RA) differ depending on the age of disease onset. Elderly onset RA (EORA: age of onset > 60 years) has been reported to differ from younger-onset RA (YORA) by a more balanced gender distribution, a higher frequency of acute onset often associated with systemic features, more frequent involvement of the shoulder girdle and higher disease activity.

To add to our knowledge of this disease, 101 EORA and 88 YORA patients, not previously treated with DMDARs or steroids, were studied and compared, paying particular attention to the onset.

The female to male ratio was higher in the YORA group (4.4:1 vs 1.6:1; $p < 0.05$). The disease duration was similar: 5.6 ± 3.3 months in EORA and 7.9 ± 3.8 months in YORA. EORA presented a more frequent acute onset (33.6% vs 13.6%; $p < 0.05$) especially if rheumatoid factor was absent. This subset also showed more frequent polymyalgic onset. Constitutional symptoms (fever, weight loss, fatigue) were more frequent in EORA patients without differences between seropositive and seronegative patients.

The distribution of involved joints showed a significantly higher frequency of shoulder involvement in EORA (64% vs 38%; $p < 0.05$) and of feet involvement in YORA (25% vs 52%; $p < 0.05$). Hands and wrists were the most frequently involved joints in all patients.

Elderly-onset rheumatoid arthritis (EORA) is defined as rheumatoid arthritis (RA) with an onset at age 60 years or over. At presentation, it differs from younger-onset RA (YORA) by its more balanced gender distribution, a higher frequency of acute onset, often associated with systemic features, more frequent involvement of shoulder-girdle, and higher disease activity.

To improve our knowledge of this disease, 101 consecutive EORA and 88 consecutive YORA patients - diagnosed using the 1987 revised American College of Rheumatology criteria for RA, in the tree format - and not previously treated with DMARDs or steroids, were studied and compared paying particular attention to the onset.

The female to male ratio was different in the two groups, being 1.6: 1 in EORA and 4.4:1 in YORA ($p < 0.05$). The disease duration was similar: 5.6 ± 3.3 months in EORA and 7.9 ± 3.8 months in YORA.

EORA presented a more frequent acute onset (33.6% vs 13.6%; $p < 0.05$) especially in the EORA Rheumatoid factor (RF)-negative patients. This subset also showed a more frequent polymyalgic onset.

Constitutional symptoms (fever, weight loss, fatigue) were more frequent in EORA patients, without any differences seen between seropositive and seronegative patients.

The distribution of affected joints at onset did not prove different except for a significantly higher frequency of involvement of the shoulder in EORA (64% vs. 38%; $p < 0.05$) and a higher frequency of involvement of the feet in YORA (25% vs. 52%; $p < 0.05$). Hands and wrists were the most frequently involved joints in all patients.

Our results are in agreement with previous studies and confirm the importance of distinguishing seropositive from seronegative EORA patients. The former are very similar to YORA seropositive patients. The latter (seronegative EORA), as reported in the literature, constitute a more heterogeneous group with a clinical picture overlapping with other syndromes such as polymyalgia rheumatica and remitting seronegative symmetrical synovitis with pitting edema (RS3PE syndrome). All of these diseases are typical in elderly subjects.

The differential diagnosis may be difficult and it must also take into consideration crystal-induced arthropathy, seronegative spondyloarthropathy, inflammatory osteoarthritis, malignancy and some post-viral arthritides. The distinction be-

tween seronegative YORA and polymyalgia rheumatica may sometimes be particularly difficult and it is probable that the two diseases represent different expressions of the same pathological entity. Therefore true seronegative RA in the elderly probably represents only part of a large group of seronegative arthritides that, at present, we are not able to differentiate.

Different studies have shown that EORA patients may have a more severe illness than YORA patients, with more relevant radiographic damage and functional decline. RF-seropositivity represents an adverse prognostic factor. Thus seropositive EORA may require more aggressive treatment with second-line drugs, while seronegative patients usually have a more favourable course and can be successfully treated with low dose steroids, OH-cloroquine, and NSAIDs (which should be administered with caution due to the frequent adverse effects in aged patients).

References

1. TROTTA F, LA CORTE R, CHIARINI D, PETITTO R, PANICALI P: Artrite reumatoide senile: modalità d'esordio. *Reumatismo* 1994,46:85-8.
2. SCHAARDENBURG VAN D, HAZES JMW, DE BOER A, *et al.*: Outcome of rheumatoid arthritis in relation to age and rheumatoid factor at diagnosis. *J Rheumatol* 1993; 20: 45-52.
3. HEIJDE VAN DER DMFM, RIEL VAN PLCM, LEEUWEN VANMA, *et al.*: Older versus younger onset rheumatoid arthritis: Results at onset and after 2 years of a prospective follow-up study of early rheumatoid arthritis. *J Rheumatol* 1991; 18: 1285-9.
4. PEASE CT, BHAKTA BB, DEVLIN J, EMERY P: Does the age of onset of rheumatoid arthritis influence phenotype ? A prospective study of outcome and prognostic factors. *Rheumatology* 1999; 38: 228-34.
5. TERKELTAUB P, ESDAILE J, DECARY F, *et al.*: A clinical study of older age rheumatoid arthritis with comparison to a younger onset group. *J Rheumatol* 1999; 10: 418-24.
6. DEAL CL, NEENAN RF, GOLDENBERG DL, *et al.*: The clinical features of elderly-onset rheumatoid arthritis. *Arthritis Rheum* 1985; 28: 987-94.
7. INOUE K, SCHICHIKAWA K, NISHIOKA J, *et al.*: Older age onset rheumatoid arthritis with or without osteoarthritis. *Ann Rheum Dis* 1987; 46: 908-11.
8. FERRACIOLI GF, CAVALIERI F, MERCADANTI M, *et al.*: Clinical features, scintiscan characteristics and X-ray progression of late onset rheumatoid arthritis. *Clin Exp Rheumatol* 1981; 2: 157-61.
9. OSTUNI P, MARSON P, PRESACCO D, *et al.*: Radiological hand involvement in elderly-onset rheumatoid arthritis: a comparative case-control study with younger-onset disease patients. *J Orthop Rheumatol* 1994; 7: 53-8.
10. HEALEY LA: Rheumatoid arthritis in the elderly. *Clin Rheum Dis* 1986; 12: 173-9.
11. HEALEY LA, SHEETS PK: The relation of polymyalgia rheumatica to rheumatoid arthritis. *J Rheumatol* 1988; 15:7 50-2.
12. HEALEY LA: Polymyalgia rheumatica and seronegative rheumatoid arthritis may be the same entity. *J Rheumatol* 1992; 19: 270-2.