Criteria, Frequency, and Duration of Clinical Remission in Psoriatic Arthritis Patients with Peripheral Involvement Requiring Second-line Drugs

FABRIZIO CANTINI, LAURA NICCOLI, CARLOTTA NANNINI, EMANUELE CASSARÀ, PAOLO PASQUETTI, IGNAZIO OLIVIERI, and CARLO SALVARANI

ABSTRACT. This article outlines our case-control, prospective, 6-year followup study to evaluate the frequency of clinical remission and duration of remission episodes in patients with peripheral psoriatic arthritis (PsA). All case patients were consecutive new outpatients with peripheral PsA requiring second-line drugs. Controls were consecutive new outpatients with rheumatoid arthritis (RA). Modified American College of Rheumatology criteria for RA were used to assess the remission in patients with PsA. One or more episodes of remission occurred in 57/236 (24.1%) PsA patients and in 20/268 (7.5%) controls ($p < 0.001$). No significant difference was recorded for duration of remissions between the group receiving traditional disease modifying antirheumatic drug (DMARD) and the anti-tumor necrosis factor (TNF) group: 11 ± 7.2 and 13.3 ± 8.1 months, respectively ($p = NS$). The duration of remission after interruption of therapy was 12 ± 2.4 months for the PsA group and 3 ± 1.5 months for patients with RA ($p < 0.001$). No predictor of remission at diagnosis could be determined by multivariate analysis. Based on our findings, remission is possible in up to 24% of patients with peripheral PsA. It is significantly more frequent, but not longer, in patients receiving anti-TNF drugs compared to those treated with traditional DMARD. (J Rheumatol 2009;36 Suppl 83:78-80; doi:10.3899/jrheum.090234)

Key Indexing Terms:
PSORIATIC ARTHRITIS RHEUMATOID ARTHRITIS REMISSION
ANTI-TUMOR NECROSIS FACTOR DISEASE MODIFYING ANTIRHEUMATIC DRUGS
DISEASE ACTIVITY

Psoriatic arthritis (PsA) is an inflammatory joint disease associated with psoriasis[1]. During the course of the disease patients usually present 3 main patterns of articular involvement: peripheral oligo-polyarthritis without axial involvement, isolated psoriatic spondylitis, and concurrent involvement of peripheral and axial articular structures[2]. PsA is an aggressive disease with development of articular erosions and deformities in around 50% of the cases[3,4]. Disease modifying antirheumatic drugs (DMARD) such as sulfasalazine, cyclosporine, methotrexate (MTX), leflunomide, and more recently anti-tumor necrosis factor–α (TNF–α) drugs have been used in patients who do not respond to the previous standard treatment mainly based on local infiltrative therapy, nonsteroidal anti-inflammatory drugs (NSAID), and cyclosporine[5-8].

Better results have been obtained with leflunomide and anti-TNF–α drugs, with a response rate of 50%-70%[9-11]. Clinical response to therapy in PsA, as in rheumatoid arthritis (RA), is usually measured in terms of percentage improvement versus baseline, but patients are rarely evaluated for remission. To date, clinical remission in patients with PsA has been evaluated in 3 clinical studies. In 2001 Gladman observed remission in 69/231 (17.6%) patients with long standing PsA (mean disease duration 11 yrs); the mean duration of remission was 2.6 years with a mean time to subsequent flare of 1.8 years. Visits were scheduled every 6 months and remission was defined as at least 3 consecutive visits with no actively inflamed joints[12]. In 2003 Kane and colleagues observed remission in 31/129 (26%) PsA patients, using American College of Rheumatology (ACR) remission criteria for RA for PsA[4]. More recently De Vlam and Lories described remission (no tender or swollen joints) in 25% of PsA patients refractory to DMARD treated with etanercept monotherapy[13].

Unlike the RA criteria[14], remission criteria for PsA have not yet been standardized. However, in keeping with other authors over 15 years of activity at our rheumatology center, we noted PsA patients who experienced prolonged remission both during treatment and after interruption of therapy. This article outlines our findings, as described[15].

From the 2nd Division of Medicine, Rheumatology Unit, Prato Hospital, Prato; Rheumatology Department of Lucania, S. Carlo Hospital of Potenza and Maddona delle Grazie Hospital of Matera, Matera; and Division of Rheumatology, Arcispedale S. Maria Nuova, Reggio Emilia, Italy.

F. Cantini, MD, Consultant; L. Niccoli, MD; C. Nannini, MD; E. Cassarà, MD; P. Pasquetti, MD, 2nd Division of Medicine, Rheumatology Unit, Prato Hospital; I. Olivieri, MD, Consultant, Rheumatology Department of Lucania, S. Carlo Hospital of Potenza and Madonna delle Grazie Hospital of Matera; C. Salvarani, MD, Consultant, Division of Rheumatology, Arcispedale S. Maria Nuova.

Address correspondence to Dr. F. Cantini, Unità Reumatologica, 2 Divisione di Medicina, Ospedale di Prato, Piazza Ospedale 1, 59100, Prato, Italy. E-mail: fcantini@usl4.toscana.it or cantini.fabrizio@virgilio.it
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Aim of the study. We sought to evaluate the frequency of clinical remission in patients with peripheral PsA and the duration of remission episodes both during treatment and over the off-therapy followup period.

PATIENTS AND METHODS

We conducted a prospective, followup case-control study over a period of 6 years, from January 2000 to December 2005. All case patients were consecutive new outpatients with peripheral PsA requiring second-line drugs. Controls were consecutive new outpatients meeting the 1987 revised criteria of the ACR (formerly, the American Rheumatism Association) for the classification of RA[15]. The primary end point was to evaluate the frequency of clinical remission in patients with peripheral PsA, as expressed by the percentage of patients fulfilling the modified ACR remission criteria (see below) versus that observed in patients with RA. Secondary endpoints were to compare the duration of clinical remission, in case patients and controls, during treatment and after therapy interruption, and to evaluate the correlation between initial clinical and laboratory variables and the frequency of remissions.

Exclusion criteria included patients with inflammatory spinal pain, assessed according to Calin's criteria[16] at presentation or during the disease course, or meeting the modified New York criteria for ankylosing spondylitis[17], and those with contraindications to the use of traditional DMARD and anti-TNF–α drugs.

ACR remission criteria for RA[14] were used to define clinical remission in patients with PsA. Considering the different clinical features of peripheral PsA we adapted the criteria by adding the following items: enthesitis, dactylitis, extraarticular features, with the exception of psoriasis, and C-reactive protein. Controls with RA were evaluated using the ACR remission criteria[14].

Patients in both groups treated with traditional DMARD or anti TNF–α drugs were considered to be in clinical remission if they satisfied the described criteria and without taking any additional drug including NSAID and cyclosporine for at least 2 consecutive visits. Followup visits were performed by the same rheumatologist at baseline and scheduled every 4 months.

RESULTS

Two hundred thirty-six patients with peripheral PsA and 268 RA control patients were observed during the 6 year period. Baseline demographic and clinical characteristics did not differ significantly between the 2 groups, with the exception of the occurrence of dactylitis, enthesitis, and tenosynovitis, which were more frequent in patients with PsA.

As shown in Table 1, one or more episodes of remission occurred in 57/236 (24.1%) PsA patients and in 20/268 (7.5%) controls ($p < 0.001$). The mean duration of remission was 13 ± 9.4 months in PsA patients and 4 ± 3.7 months in controls ($p > 0.001$). No significant differences resulted regarding the baseline demographic and clinical characteristics of PsA patients with and without clinical remission. Episodes of remission were observed in 31 out of 160 PsA patients in the traditional DMARD group, and in 46 out of 76 patients in the anti-TNF–α group ($p \leq 0.001$). No significant difference was recorded in duration of remissions between the traditional DMARD group and anti-TNF group: 11 ± 7.2 and 13.3 ± 8.1 months, respectively (p = NS).

From January 2003 to December 2005 therapy was discontinued in PsA patients and controls in clinical remission. Over this period, 37/73 (50.7%) PsA patients and 8/71 controls experienced at least 1 episode of remission. The total numbers of remissions were 44 out of 73 PsA patients and 12 controls ($p < 0.001$).

Table 1. Treatment and frequency of remission response rate in patients with peripheral PsA and controls with RA at the end of followup.

	PsA, n=236	RA Controls n=268	p
Patients with remission, no. (%)	57 (24.1)	20 (7.4)	<0.001
Overall episodes of remission, no. (%)	77	24	<0.001
MTX, no. (%)	23 (29.9)	12 (50)	NS
MTX + CsA, no. (%)	8 (10.4)		
Anti-TNF-α, no. (%)	46 (59.7)	12 (50)	NS
Remission Duration, months mean ± SD	13 ± 9.4	4 ± 3.7	<0.001

MTX: methotrexate; CsA: cyclosporin A; anti-TNF-α: anti-tumor necrosis factor-α.

During the off-therapy period the frequency of remission in PsA patients was significantly higher in those treated with anti-TNF–α drugs versus those treated with MTX alone (79.5% vs 20.4%; $p \leq 0.001$). The duration of remission after interruption of therapy was 12 ± 2.4 months for the PsA group and 3 ± 1.5 months for patients with RA ($p < 0.001$).

No predictor of remission at diagnosis could be determined by multivariate analysis.

CONCLUSION

Remission is possible in up to 24% of patients with peripheral PsA. Remission is significantly more frequent, but not longer, in patients receiving anti-TNF drugs compared to those treated with traditional DMARD. Patients remain in remission for a long period after interruption of therapy, thus suggesting an intermittent therapeutic strategy.

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