The Swedish Early Psoriatic Arthritis Register — 2-year Followup: A Comparison with Early Rheumatoid Arthritis

ULLA R.C. LINDQVIST, GERD-MARIE ALENIUS, TOMAS HUSMARK, ELKE THEANDER, GUNILLA HOLMSTRÖM, and PER T. LARSSON, for the Psoriatic Arthritis Group of the Society for Rheumatology

ABSTRACT. ***Objective.*** Patients with symptoms and signs compatible with psoriatic arthritis (PsA), with or without psoriasis, have been documented in the Swedish Early Psoriatic Arthritis (SwePsA) register. Our aim was to find markers for disease progression and to evaluate treatments for PsA using these data.

Methods. Patients referred to rheumatology outpatient clinics within 2 years of onset were assessed on inclusion and at followup 2 years later. Data collection was performed according to the program for SwePsA, and classification was as described by Moll and Wright and the ClASsification Criteria for Psoriatic ARthritis (CASPAR). Remission was recorded if the patient had no tender or swollen joints and if erythrocyte sedimentation rate (ESR) and C-reactive protein (CRP) were within the reference range. Patients with early rheumatoid arthritis (RA) recruited from the Swedish Early Rheumatoid Arthritis Register (Ramona) provided comparison data.

Results. One hundred thirty-five patients with PsA according to CASPAR were assessed; 44% were classified as having mono/oligoarthritis and 47% as polyarthritis. Two patients (1%) were in remission initially, and 23 (17%) at followup. Patients with polyarticular disease had the highest inflammatory activity, measured by swollen and tender joint counts, ESR, Health Assessment Questionnaire, and self-assessment by visual analog scale of pain and global disease activity. Dactylitis was associated with radiological findings. Compared with RA patients, they had significantly lower CRP, ESR, and number of swollen joints ($p = 0.0003$, $p = 0.0026$, $p = 0.0380$, respectively) at inclusion, but equal numbers of tender joints and self-assessment of pain and disease activity.

Conclusion. About half the patients had polyarthritis and the other half had mono/oligoarthritis at followup after 2 years. Patients with polyarthritis had the highest inflammatory activity. Apart from ESR, CRP, and swollen joint count, there were no significant differences in activity between RA and polyarticular PsA. (First Release Feb 15 2008; J Rheumatol 2008;35:668–73)

Key Indexing Terms:
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REMISSION DISEASE MODIFYING ANTIRHEUMATIC DRUGS

Psoriatic arthritis (PsA) is a heterogeneous disease with a varying pattern and degree of severity. It can be expressed as mild mono/oligoarthritis or as very severe, erosive, and destructive polyarthritis, often indistinguishable from rheumatoid arthritis (RA), as well as spondyloarthropathy (SpA) with axial involvement or enthesitis. The existence of several disease subgroups and the change in the clinical picture over time, often confounded by the effects of disease modifying antirheumatic drugs (DMARD)[1], as well as the difficulties in differentiating patients from those with seronegative polyarthritis with psoriasis, may explain the numerous articles and debates on the subject. As observed by Gladman, *et al*[2], this disease requires structured management, with collection of clinical investigation data in large databases. Today there are at least 10 databases with different clinical approaches that could form the basis for a worldwide collaborative registry.

Early detection of inflammatory joint or axial involvement in patients with PsA is important to reduce the inflammation and to prevent destruction, deformity, and functional disability in joints. In 6 centers in Sweden, patients with early inflammatory symptoms and signs compatible with PsA, with or without psoriasis, have been documented in the Swedish PsA register (SwePsA)[3]. The aim of the register is

From the Department of Medical Sciences, Rheumatology, University Hospital, Uppsala; Department of Public Health and Clinical Medicine, Rheumatology, Umeå; Department of Rheumatology, Falu Hospital, Falun; Department of Rheumatology, University Hospital, Malmö; Spenshult Rheumatological Hospital, Oskarström; and Karolinska University Hospital, Stockholm, Sweden.

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U.R.C. Lindqvist, MD, PhD, Department of Medical Sciences, Rheumatology, University Hospital, Uppsala; G-M. Alenius, MD, PhD, University Hospital, Department of Public Health and Clinical Medicine, Rheumatology, Umeå; T. Husmark, MD, Department of Rheumatology, Falu Hospital; E. Theander, MD, PhD, Department of Rheumatology, University Hospital, Malmö; G. Holmström, MD, Spenshult Rheumatological Hospital; P.T. Larsson, MD, PhD, Karolinska University Hospital.

Address reprint requests to Dr. U. Lindqvist, Department of Medical Sciences, Rheumatology, Entrance 40, 5th floor, University Hospital, SE-751 85 Uppsala, Sweden. E-mail: Ulla.Lindqvist@medsci.uu.se

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to support studies of early PsA in the Swedish population, the course of the disease, socioeconomic issues, and working ability, and also to enable researchers to find markers of disease progression and to evaluate treatments. Opinions differ whether PsA is a distinct disease entity[4]; we therefore investigated the development of the joint disease in patients with symptoms and signs compatible with PsA with or without skin involvement.

Apart from an evaluation of initial data from the SwePsA register, only a few studies have focused on early PsA. A 24-month followup study on SpA, peripheral arthritis, and psoriasis showed that acute-phase markers reflected articular manifestations, joint damage, and progression of disease[5]. Another 2-year followup study of PsA at an early arthritis clinic[6] confirmed a conclusion that longstanding PsA[7] is a chronic, progressive disease in which radiological damage is seen in half the patients 2 years after onset. Age also seems to influence the outcome, as onset of arthritis in the elderly predicts a more destructive disease compared with onset at a young age[8].

The aim of our report from the SwePsA cohort was to characterize the course of the disease, to find markers for disease progression, to evaluate treatments at 2 years of followup, and to identify similarities and dissimilarities to RA.

MATERIAL AND METHODS

Patients. Patients with early PsA, defined as inflammatory joint symptoms and signs with a duration < 2 years and compatible with PsA, with or without psoriasis, referred to rheumatology outpatient clinics in Sweden were assessed by the same rheumatologists on inclusion in the register and at followup 2 years later (participating institutions included Department of Rheumatology, University Hospital, Uppsala; Department of Rheumatology, Falu Hospital, Falun; Department of Rheumatology, University Hospital, Malmö; Spenshult Hospital for Rheumatic Diseases, Oskarström; Department of Rheumatology, University Hospital, Umeå; and Department of Rheumatology, Karolinska University Hospital, Stockholm). More than 300 patients have been entered in the register since 2000. Data have been collected in accord with the program for SwePsA[3]. All assessments were made in conformity with this program, with clinical examination including 66/68 joint counts for swollen and tender joints, examinations for enthesis, inflammation of tendon sheaths and skin inflammation [Psoriasis Area and Severity Index (PASI)], physician's global assessment of joint disease activity, and subclassification essentially according to Moll and Wright[9]. Patients were considered to be in remission if they had no tender and swollen joints and if the erythrocyte sedimentation rate (ESR) and C-reactive protein (CRP) levels were within the reference range. Current and previously prescribed medication was recorded. Patients were asked to complete a 5-grade scale for assessment of disease activity and a 100 mm visual analog scale (VAS, 0–100) for joint pain and global assessment. They were also asked to report pain and disability in the Health Assessment Questionnaire (HAQ) and the Medical Outcomes Study Short-Form 36 (SF-36). In addition patients provided demographic data and information on heritability for psoriasis, PsA, and RA.

At the baseline visit (i.e., on inclusion in the SwePsA) patients could either be untreated and newly diagnosed or prediagnosed and pretreated by another rheumatologist, as long as the total duration of disease was not longer than 2 years from the onset of symptoms. In June 2007, 184 of the 325 patients included at that time had been followed for 2 years; 156 of these were considered to have PsA according to Moll and Wright[9]. Twenty-seven had possible PsA, because of the lack of skin involvement on inclusion or at followup. One hundred thirty-five patients met the ClASsification Criteria for Psoriatic ARthritis (CASPAR) for classification of PsA[10] on inclusion or at the 2-year followup. Our report is based on these 135 patients; demographic and other data are shown in Table 1. Two patients were judged to be in clinical remission at inclusion.

Rheumatoid arthritis. For comparison of inflammatory activity and of the clinical outcome regarding subjective patient assessment and function, 634 women and 267 men with early RA were recruited from the Swedish Early Rheumatoid Arthritis Register (Ramona)[11]. All comparisons were adjusted for age, as the patients with RA were older than the patients with PsA.

Laboratory investigations. ESR was analyzed by Westergren method, and CRP level was determined by standard nephelometry. Rheumatoid factor (RF) was measured by ELISA or Waaler-Rose test, and a level > 20 IU or a titer ≥ 1/40 by ELISA was regarded as positive. Two percent of patients were RF-positive.

Radiological assessment. Plain radiographs were obtained as required on

Table 1. Demographic data of patients with early psoriatic arthritis (PsA) with comparison between the different classification groups. Two patients were in remission and 2 patients had distal joint involvement on inclusion.

	All Patients, n = 135	Mono or Oligoarticular, n = 60	Polyarticular, n = 64	Axial, n = 7
Age, mean ± SD yrs	47.3 ± 15.2	46.7 ± 16.2	48.4 ± 14.7	42.3 ± 12
Female sex, no. (%)	78 (58)	29 (48)	44 (69)	2 (29)
Nonsmokers, no. (%)	51 (38)	22 (37)	23 (36)	5 (71)
RF, no. (%)	3* (2)	0	3 (4.7)	0
First-degree relative with psoriasis, no. (%)	49 (36)	19 (32)	27 (42)	1 (14)
First-degree relative with PsA, no. (%)	7 (5)	3 (5)	6 (9.4)	0
Duration of psoriasis, yrs ± SD	13.8 ± 14.4	11.4 ± 12.5	15.9 ± 16.2	12.7 ± 9.3
Duration of PsA, mo ± SD	11.4 ± 6.6	10.2 ± 5.8	12.3 ± 7.3	16.4 ± 4.3
DMARD on inclusion	51 (38)	19 (31.7)	34 (53)	1 (14)

Values are given as number of patients (percentage of total in the group). * 3 of 128 patients. RF: rheumatoid factor.

the basis of the patient's clinical picture and classification at entry (n = 115) and at the 2-year followup (n = 70). Radiological findings including joint space narrowing, erosions, periostitis, and enthesitis compatible with PsA were recorded. Additional findings at the same location or associated with observations of new inflammation were recorded. Radiological progression of disease, used for calculation of prognostic factors, was based on damage in individual patients at 2-year followup that was not recorded at entry. The plain radiographs were assessed by local radiologists.

Statistical methods. All values are given as mean ± standard deviation (SD). Cross-tables were used for analysis of the data and Fisher's exact test was used for associations between groups. The independent t-test and Mann-Whitney U-test were used for comparing means and medians between groups. Association between continuous variables was tested by correlation analysis. Nonparametric Spearman correlation coefficient was used for association between clinical observations and outcome. Sensitivity, specificity, positive predictive value (PPV), and negative predictive value (NPV) were calculated for the CASPAR criteria, assuming the Moll and Wright criteria as the gold standard.

RESULTS

Classification. The numbers of patients diagnosed as PsA according to Moll and Wright or/and CASPAR criteria during the followup are shown in Table 2. The sensitivity, specificity, PPV, and NPV are also given in Table 2.

Results of the classification upon inclusion and the reclassification at the 2-year followup visit are shown in Table 3. One patient with SAPHO syndrome was included in the register and exhibited a polyarticular classification pattern, but did not fulfil the PsA CASPAR criteria. No patient was found to have mutilans arthritis. Two patients were classified as being in remission on inclusion; neither had inflammatory activity or radiological damage at entry. At the 2-year followup 44% of the polyarthritis and 60% of mono/oligoarthritis patients showed a stable disease pattern. Twenty-three percent of the mono/oligoarthritis patients and 14% of the polyarthritis patients were in remission at the 2-year followup.

Table 2. Psoriatic arthritis (PsA) according to Moll and Wright[9] on inclusion or at followup and according to CASPAR[10] on inclusion or at followup. One patient is missing. Sensitivity 83%, specificity 81%, positive predictive value 96%, and negative predictive value 44%.

	PsA According to CASPAR on Inclusion or at Followup		
	Not PsA	PsA	Total
PsA according to Moll and Wright on inclusion or at followup			
Not PsA	22	5	27
PsA	27	129	156
Total	49	134	183

Disease manifestations

All patients. The clinical activity and outcome measures in the different classification groups are presented in Table 4. Compared to men, women had significantly higher ESR (mm/h; women 20.3 ± 19.5, men 13.1 ± 14.5; p = 0.021), VAS pain scores (women 48.3 ± 24.9, men 39.7 ± 22.7; p = 0.042), and HAQ scores (women 0.77 ± 0.57, men 0.51 ± 0.52; p = 0.007) on inclusion, and higher VAS pain scores (women 38.7 ± 26.1, men 28.4 ± 25.3; p = 0.024), patient global assessment (women 40.7 ± 25.6, men 31.3 ± 26.4; p = 0.042), and HAQ (women 0.68 ± 0.83, men 0.37 ± 0.69; p = 0.022) at followup. Otherwise there were no gender differences. On inclusion there was a significant correlation between both ESR and CRP and number of swollen joints (r = 0.308, p < 0.001; r = 0.419, p < 0.0001, respectively). The physician's mean global assessment of disease activity decreased significantly over the 2 years, from 1.4 to 0.8 (scale and range 0–3; p = 0.0001). On inclusion, 116 patients had skin manifestations compatible with psoriasis and 44 had nail lesions. Nineteen patients had no skin or nail involvement. Two years later these figures were 121 and 37 patients, respectively, and the total number without skin and nail involvement had increased to 29 patients. Assessment of the skin manifestations with the PASI score showed a mild skin disease with a mean score of 3.6 ± 3.8 on inclusion and 3.1 ± 3.6 at the 2-year followup, with no significant change in activity over time.

Radiological examination was performed in 120 patients on inclusion, and proliferation or destruction indicating PsA was found in 24 (20%) patients. Seventy-nine patients were examined radiologically at the 2-year followup, and altogether 23 (32%) patients exhibited radiological changes consistent with PsA.

Table 3. Classification of patients with early PsA on inclusion and at followup 2 years later. Total number of patients in each group.

Classification at First Visit	Classification at 2 yr Followup				
	Mono or Oligoarticular, n = 64	Polyarticular, n = 38	Axial n = 6	Distal Interphalangeal, n = 4	Remission, n = 23
Mono or oligoarticular, n = 60	36	8	1	1	14
Polyarticular, n = 64	26	28	0	1	9
Axial, n = 7	1	1	5	0	0
Distal interphalangeal joint, n = 2	0	0	0	2	0
Remission, n = 2	1	1	0	0	0

Table 4. Clinical activity and outcome measures in the different groups as classified in the Early Swedish Psoriatic Arthritis Register. Values given as on inclusion/at 2-yr followup.

	Mono or Oligoarticular, n = 60	Polyarticular, n = 64	Axial, n = 7	All, n = 135
No. swollen joints	1.9 ± 1.4/0.8 ± 1.1	7.2 ± 4.9*/2.7 ± 4.6*	0.9 ± 1.9/0.4 ± 1.1	4.4 ± 4.5/1.8 ± 3.4**
No. tender joints	2.1 ± 2.1/1.7 ± 2.1	9.9 ± 7.5*/5.5 ± 8.9*	0.4 ± 0.8/1.4 ± 2.3	5.8 ± 6.7/3.6 ± 6.7**
HAQ score (0–3)	0.47 ± 0.45/0.42 ± 0.68	0.90 ± 0.6*/0.72 ± 0.90*	0.43 ± 0.26/0.25 ± 0.29	0.66 ± 0.56/0.55 ± 0.79
ESR, mm/h	14.1 ± 15.4/11.3 ± 10.7	21.6 ± 20.3*/11.9 ± 10.3	8.8 ± 4.5/5.6 ± 4.2	17.3 ± 17.9/11.2 ± 10.2**
CRP, mg/l	11.1 ± 9.1/8.6 ± 10.5	19.2 ± 30.2/6.1 ± 4.4	8.7 ± 3.8/5.4 ± 1.1	14.7 ± 21.9/7.2 ± 7.6**
Radiology†	7/15	15/18	0/0	24/33
Pain VAS, mm	39 ± 22/31 ± 27	51 ± 24*/37 ± 26	39 ± 28/36 ± 29	44 ± 24/34 ± 26**
Patient global assessment VAS, mm	38 ± 22/32 ± 24	48 ± 25*/41 ± 27	44 ± 29/37 ± 31	43 ± 24/37 ± 26**
PASI	3.1 ± 4.0/2.9 ± 3.6	3.8 ± 3.1/3.2 ± 3.6	5.4 ± 6.1/3.1 ± 2.8	3.6 ± 3.8/3.1 ± 3.6

† Number of patients with radiological changes compatible with PsA. * Mann-Whitney U test for analysis of significance of differences at $p \leq 0.05$ between mono or oligoarticular and polyarticular patient groups. ** Paired t test for analysis of differences at $p \leq 0.05$ in the total patient group on inclusion and at followup. PsA: psoriatic arthritis, ESR: sedimentation rate. CRP: C-reactive protein, HAQ: Health Assessment Questionnaire, VAS: visual analog scale, PASI: Psoriasis Area and Severity Index.

Patients with polyarthritis at baseline. Patients initially classified as having polyarthritis had significantly greater inflammatory activity on inclusion compared to patients with a mono/oligoarticular disease pattern, and this affected their quality of life [by HAQ score, SF-36 with body pain and physical function (data not shown), and measures such as VAS pain and VAS for patient global assessment; Table 4]. Fifteen of 60 patients (25%) had radiological changes compatible with PsA on inclusion at the baseline visit. At the 2-year followup, 42 patients with polyarthritis were reexamined: 5 of the patients without radiological changes initially had developed pathological changes, although 49% of all patients were being treated with a DMARD on inclusion. Fourteen percent were in remission at the 2-year followup. Twenty-three patients had dactylitis on inclusion; the inflammatory activity and clinical picture did not differ from patients without dactylitis. Radiological examination was performed in 20 patients with dactylitis on inclusion, and 6 exhibited radiological changes compatible with PsA. At the 2-year followup the number had increased to 8 patients with pathological findings.

Patient's assessment of disease. PsA patients reported a high level of pain on a VAS scale, with a mean level of 44 ± 24 (range 0–100), and this had decreased significantly to 34 ± 26 ($p = 0.012$) at 2-year followup. The subjective global assessment of the disease also decreased significantly over the 2 years of followup ($p = 0.015$). Patients' function improved over the time of observation, but not significantly.

Therapy. Fifty-one patients with PsA were receiving a DMARD after inclusion. These patients had significantly higher swollen joint counts (6.6 ± 5.4 / 3.4 ± 3.6; $p = 0.001$) and physician's mean global assessment of disease activity (1.67 ± 0.62 / 1.36 ± 0.48; $p = 0.005$ compared to nontreated patients). At 2-year followup patients that had received DMARD after inclusion still had a tendency to a higher number of swollen joints (2.65 ± 4.9 / 1.27 ± 2.0; $p = 0.065$) and the physician's mean global assessment of disease activity was still significantly higher (1.7 ± 0.6 / 1.4 ± 0.4; $p = 0.005$). There were no differences in radiological outcome or number of patients in remission between those patients treated and those nontreated after 2 years.

Prognostic factors for remission at 2-year followup. Remission at the 2-year followup was associated with small numbers of tender joints ($p = 0.0108$) and to nail manifestations on inclusion ($p = 0.0076$), but not to any other initial clinical manifestations or treatment with DMARD. There was a relation between classification on inclusion ($p = 0.0603$) and physician's global assessment of disease activity ($p = 0.0505$) with remission at followup.

Comparisons with patients with early RA. On inclusion, patients with RA had significantly greater inflammatory activity compared to all PsA, with a higher mean ESR ($p < 0.0001$) and CRP ($p < 0.0001$) and a larger number of swollen ($p < 0.0001$) and tender joints ($p < 0.0001$) (Table 5). There was also more limited function in early RA, observed as a significantly higher mean HAQ value ($p < 0.0001$), and the patients reported significantly higher VAS pain ($p = 0.0311$) and higher global assessment of disease ($p < 0.0051$). At 2-year followup the inflammatory activity had decreased in both groups, but ESR and CRP remained significantly higher in RA ($p < 0.0001$, $p = 0.0001$, respectively). Comparing patients with polyarticular PsA and patients with RA, the patients with RA had significantly higher ESR and CRP both on inclusion ($p = 0.0003$ and $p = 0.0026$, respectively) and 2 years later ($p = 0.0026$ and $p = 0.0001$). Initially the number of swollen joints was larger in RA ($p = 0.0380$), but otherwise there were no differences between RA and polyarticular PsA. At followup, polyarticular PsA patients had significantly more tender joints and higher value of global assessment of disease. All results were stratified for age in the 2 diagnostic groups.

Table 5. Inflammatory and clinical outcome in patients with early psoriatic arthritis (PsA) and rheumatoid arthritis (RA). Values given as mean (SD).

	Inclusion				2-yr Followup			
	PsA	PsA with Polyarthritis	RA	p*	PsA	PsA with Polyarthritis	RA	p*
CRP, mg/l	14.7 ± 21.9	19.6 ± 30.6	30.8 ± 33.9	< 0.0001† 0.0026††	7.2 ± 7.6	6.3 ± 4.3	12.4 ± 16.6	0.0001† 0.0001††
ESR, mm/h	17.3 ± 17.9	21.8 ± 20.6	35.4 ± 25.4	< 0.0001† 0.0003††	11.2 ± 10.2	11.8 ± 10.4	19.8 ± 18.2	< 0.0001† 0.0026†
No. swollen joints	4.4 ± 4.5	7.3 ± 4.9	9.3 ± 5.3	< 0.0001† 0.0380††	1.8 ± 3.4	2.7 ± 4.6	2.3 ± 3.6	NS† NS††
No. tender joints	5.8 ± 6.7	10.0 ± 7.6	8.1 ± 6.4	< 0.0001† NS††	3.6 ± 6.7	5.6 ± 9.0	2.6 ± 4.1	NS† 0.0049††
VAS pain, mm	44. ± 24	51 ± 25	49 ± 26	0.0311† NS††	34 ± 26	36 ± 26	29 ± 24	NS† NS††
VAS total, mm	43 ± 24	47 ± 24	49 ± 26	< 0.0051† NS††	37 ± 26	40 ± 26	29 ± 24	0.0207† 0.0070††
HAQ	0.66 ± 0.56	0.90 ± 0.61	1.04 ± 0.6	< 0.0001† NS††	0.55 ± 0.79	0.72 ± 0.91	0.62 ± 0.58	NS† NS††

* Adjusted for age. † Differences between PsA and RA; †† Differences between PsA with polyarthritis and RA. CRP: C-reactive protein, ESR: sedimentation rate, VAS: visual analog scale, VAS total: patient's global assessment, NS: nonsignificant, HAQ: Health Assessment Questionnaire.

DISCUSSION

We analyzed longitudinal data from 2 years of followup, reviewing the progress of disease in 135 patients with early PsA. At reevaluation after 2 years of conventional clinical care we found that 17% of the whole series of patients were in remission and that radiological damage was verified on inclusion or at followup in 31% of the PsA patients (n = 118). Four longitudinal studies on early PsA have previously been reported[5,6,8,12]. The first study[12] was conducted on PsA patients with polyarthritis and comprised 51 patients at 1-year followup. Later, Punzi, *et al*[8] presented 66 PsA patients, including all classification groups, with a 2-year followup. Stafford, *et al*[5] reported a study conducted at an early arthritis clinic comprising 82 PsA patients classified as having SpA with additional peripheral joint inflammation, with a 2-year followup, and Kane, *et al*[6] presented 2 years of data on 97 patients with PsA.

PsA is a multifactorial disease with 4 different clinical pictures. Classification groups have predictive value for clinical assessment. With the availability of effective but expensive treatments, it is valuable to be able to make a classification and a prognostic evaluation as early as possible in the course of the disease. The first diagnostic and classification work was achieved by Moll and Wright, who in 1973 distinguished between 5 different groups of PsA[9]. This work has been followed by reevaluations and new suggestions on classification. The distinct distal joint (distal interphalangeal joint) disease group has been reclassified into the polyarthritis group, and mutilans arthritis is considered a more severe form of the disease but not a distinctive group[1].

The initial classification of our patients according to the system of Moll and Wright revealed a predominance of mono/oligoarthritis (44%) and polyarthritis (47%), in accord with the report by Kane, *et al*[1]. With the Veale classification system[13], they identified oligoarticular disease in 40% and polyarticular disease in 60% of their patients. They did not include any patients with spondylitis/sacroiliitis, and our figure of 5% with axial disease could not therefore be confirmed. However, there is one report on PsA from an early SpA clinic[5], describing the presence of inflammatory back pain in 16% of the PsA patients. In our initial report of SwePsA[3] we found that 14% of the patients in the study had a clinical history of inflammatory back pain, but after 2 years of followup only 3% presented a clinical picture with axial involvement. In the present study we have applied the CASPAR criteria on early PsA. The Moll and Wright criteria were used as the standard, but we also included patients with inflammatory joint activity compatible with PsA without skin involvement. As such they did not fulfil the criteria for PsA according to Moll and Wright, but 5 of the 27 patients fulfilled the new CASPAR criteria[10], as they were found to have first- or second-degree relatives with psoriasis. Taylor, *et al*[10] assumed in the presentation of the CASPAR criteria that it would not be possible to apply the criteria on recent-onset disease. In our cohort with early PsA we found a low negative predictive value, which could be explained by the incomplete radiological analysis that partly limited the fulfillment of the CASPAR classification.

Our study confirms demographic data obtained in earlier studies in PsA regarding age, gender, and frequencies of RF[6,12]. Thirty-six percent of our patients with PsA stated that they had a first-degree relative with psoriasis. The heritability for psoriasis has been estimated to be 60% to 90%[14]. Further, 5% of the patients in our study cohort had a first-degree relative with PsA. The overall prevalence of PsA among first-degree relatives has been estimated to be 5.5%.

Our results are based only on the patients' statements, however, and the relatives were not assessed. In this study patients with RA were included for comparison of inflammatory activity. Patients with RA initially had significantly higher inflammatory activity, higher self-assessment of pain and disease activity, and more reduced function compared to patients with PsA. These results indicate that the 2 cohorts are distinctive patient groups, and this is supported by the low number (2%) of PsA patients fulfilling the criteria for positive RF. After 2 years of disease, patients with PsA still exhibited lower systemic inflammation, but patients with polyarthritis had worse pain and self-assessed disease activity. To our knowledge, there are no other studies that support these findings.

It is well known that PsA disease is not stable over time. Classification of the disease in the individual patient changes with time, and moreover, data in earlier studies have been based upon different classification systems[9,12]. In our study the results of the classification and the reclassification after 2 years were very much in accord with earlier reports[1], although we found somewhat more patients with polyarticular disease. At the 2-year followup a higher percentage of our patients still had high disease activity with a polyarticular pattern (28%), but there was also a higher proportion of patients in remission (17%). The change in the classification pattern over time is partly due to use of medication, but we also observed remission in patients without DMARD treatment, and the initial assessment is probably the most representative for the outcome of individual patients. We therefore used the initial clinical picture in describing prognostic factors.

Other studies have yielded similar results for polyarticular disease, and the number of active inflamed joints has been reported to be a prognostic factor for PsA[15,16]. In our study a high active joint count on inclusion was not associated with a risk of developing radiological changes, but a low tender joint count on inclusion was associated with remission of disease. Twenty-three patients had acute dactylitis on inclusion. A higher percentage of patients with acute dactylitis exhibited radiological changes in association with PsA at the 2-year followup compared to patients without dactylitis. In a recent study, dactylitis was documented in 48% of patients, most commonly in the feet; increased radiological progression was noted in digits affected with dactylitis[17]. Our results on early PsA confirm the findings in the latter study, which was based on longstanding PsA.

Our study confirms earlier reports on the clinical picture in early PsA, where polyarticular disease is as common as mono/oligoarticular disease. Remission was associated with a small number of tender joints and related to a low physician global assessment of the disease. Patients with polyarticular disease had the highest inflammatory activity, and progression to radiological damage was most frequent in this group. The disease activity in all patients with PsA was significantly lower than that in patients with early RA. Nevertheless, early PsA is a destructive disease that affects patients' well-being, function, quality of life, and working ability, and prognostic tools need to be developed for research and management of these patients.

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