

# Clinical characterization of patients with psoriatic arthritis

## Caracterização clínica de pacientes com artrite psoriásica

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### ABSTRACT

**BACKGROUND AND OBJECTIVE:** Psoriatic arthritis is a disease with variable and heterogeneous clinical presentation at the dermatological or rheumatological point of view. Multiple combinations within their subtypes are possible. This survey had the aim to characterize a group of patients with psoriatic arthritis and describe a pattern of them to contribute to better understanding the disease. **METHODS:** This study had cross-sectional design and had evaluated 45 patients with psoriatic arthritis under treatment at the Rheumatology Department of University Hospital Clementino Fraga Filho, Universidade Federal do Rio de Janeiro. Demographic and clinical data obtained were treated descriptively. **RESULTS:** Male patients are 57.8% of the sample. They are 52.9 years-old at average. Most of them are overweight and dyslipidemic. Utilize methotrexate 64.4% of patients and TNF- $\alpha$  inhibitors 31.1%. Plaque type psoriasis was found in 88.9%. Joints most affected are hands and wrists accompanied by 86.7% of extra-articular manifestations. **CONCLUSION:** Sample studied is composed mostly by male gender, with cardiovascular risk factors, plaque type psoriasis, peripheral polyarthritis and with extra-articular manifestations.

**Keywords:** Arthritis, psoriatic/diagnosis; Spondylarthropathies/diagnosis; Psoriasis; Skin manifestations

### RESUMO

**JUSTIFICATIVA E OBJETIVO:** A artrite psoriásica é doença de apresentação clínica variável e heterogênea, seja do ponto de vista dermatológico ou reumatológico, podendo haver múltiplas combinações entre seus subtipos. Esse estudo teve por objetivo caracterizar clinicamente uma população portadora de artrite psoriásica para traçar um perfil dos pacientes e contribuir para o entendimento da doença. **MÉTODOS:** Estudo com delineamento transversal com 45 pacientes com diagnóstico de artrite psoriásica em tratamento no serviço de Reumatologia do Hospital Universitário Clementino Fraga Filho da Universidade Federal do Rio de Janeiro. Os dados demográfico e clínicos-sociais, cutâneos e articulares obtidos foram analisados de modo descritivo. **RESULTADOS:** Pertencem ao sexo masculino 57,8% dos pacientes. A média de idade foi de 52,9 anos. A maior parte tem sobrepeso e dislipidemia. Utilizam metotrexato 64,4% dos pacientes e inibidores do TNF- $\alpha$  31,1%. A psoríase em placas foi observada em 88,9% dos casos. As articulações mais comumente afetadas foram as mãos e os punhos acompanhadas de manifestações extra-articulares em 86,7% dos pacientes. **CONCLUSÃO:** A população estudada foi composta majoritariamente por pacientes do sexo masculino, portadores de fatores de risco cardiovascular, psoríase em placas, poliartrite periférica e com presença marcante de manifestações extra-articulares.

**Descritores:** Artrite psoriásica/diagnostico; Espondiloartropatias/diagnostico; Psoríase; Manifestações cutâneas

### INTRODUCTION

Although some clinical findings lead psoriatic arthritis toward one single disease, it is not the same for all patients<sup>(1)</sup>. It's an heterogeneous disease with unknown exact incidence, but defined diagnosis is observed in 7 to 40% of psoriatic patients. Rheumatic manifestations such as arthralgia may be present in 90%<sup>(2)</sup>. This variability of incidence may be explained by selection biases, use of different classification criteria and use of designs with less potential to reflect the global evolution of the disease<sup>(3)</sup>. Psoriasis and psoriatic arthritis are complex and heterogeneous entities that may present multiple combinations among their subtypes. It is not clear, indeed, if they are distinct or just variants of the same disease<sup>(4)</sup>.

This study had the aim to clinically characterize a group of psoriatic arthritis patients. This is fundamental for therapeutic decisions to Internal Medicine, Dermatology and Rheumatology.

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## METHODS

This study had transversal design and was conducted at Rheumatology Department of Universidade Federal do Rio de Janeiro (UFRJ). Were identified 65 psoriatic patients from database of the department. Twenty patients were excluded by: two deaths, four refusing to participate, five showed inabilities to go to the hospital and nine outdated contacts. Final sample was convenient composed by 45 patients.

Patients were contacted by phone and went to the hospital. Were recorded social and demographic information, comorbidities, use of medications, skin and articular disease and extraarticular manifestations data. Data were collected always by the same examiner, tabled at Excel and transferred to software SPSS version 15.0 and had descriptive analysis. Study was approved by ethical research committee (registration number 085/2010).

## RESULTS

Among 45 patients, 26 (57.8%) are male gender and 24 caucasian (53.3%). Average of age were  $52.9 \pm 14.9$  years-old (13-80). Main comorbidities found were overweight (51.1%), dyslipidemia (48.9%) and high blood pressure (37.8%). Medications most used are methotrexate (64.4%), antihypertensives (37.8%) and TNF- $\alpha$  inhibitors (31.1%) (Table 1).

**Table 1.** Comorbidities and medications of psoriatic arthritis patients

Clinical findings		n	%
Physical symptoms	Scaling	33	73.3
	Itching	31	68.9
	Dryness	29	64.4
Skin disease	Elbows	27	60
	Nails	25	55.6
	Scalp	21	46.7
Joint disease	Hands/wrists	27	88.2
	Feet/ankle	28	68.2
	Knees	24	53.3
Extra-articular manifestations	Enthesitis	34	75.6
	Dactylitis	21	46.7

Plaque type psoriasis was the most frequent cutaneous presentation (88.9%). Body regions most affected were elbows (60%), nail (55.6%) and scalp (46.7%). Physical symptoms such as scaling and itching occurred in 73.3 and 68.9% respectively. Hands and wrists were the most affected articular territories (88.2%). Feet were affected in 68.2% and knees 53.3% of cases (Table 2). The average number of affected joints was 11.5 (1-51) with peripheral distribution in 80% of cases.

Extraarticular manifestations occurred in 86.7%. Enthesitis was the most frequent (75.6%) and dactylitis was the second (46.7%). It was observed just one case of uveitis (2.2%).

**Table 2.** Clinical findings in psoriatic arthritis patients

Diseases and medications		n	%
Associated comorbidities	Overweight	23	51.1
	Dyslipidemia	22	48.9
	High blood pressure	17	37.8
Medications	Methotrexate	29	64.4
	Anti-hypertensive	17	37.8
	Anti-TNF	14	31.1

## DISCUSSION

Psoriatic arthritis is a complex and heterogeneous disease that might be similar to rheumatoid (rheumatoid) arthritis, or ankylosing spondylitis or have singular characteristics<sup>(5)</sup>. Rheumatoid arthritis has predilection to the female gender, but psoriatic arthritis has similar sex distribution (proportion 1:1)<sup>(6,7)</sup>. However, this study found a higher prevalence in males (57.8 versus 42.2%).

Main comorbidities found are directly related to the metabolic syndrome. Psoriatic arthritis patients have reduced quality of life due to premature cardiovascular disease<sup>(8)</sup>. Furthermore, it was recently shown that patients with psoriatic arthritis and cardiovascular risk factors have higher rates of intimal thickening than arthritis patients without risk factors<sup>(9)</sup>.

The most commonly drug used is methotrexate (64.4%). Not least, is considered the drug of choice for unresponsive cases to anti-inflammatory drugs, remembering that those medications are not able to change the course of the disease<sup>(10)</sup>. It is worth noting the relatively high number of patients using TNF- $\alpha$  inhibitors (31.1%). This fact can be interpreted by the case of a sample of patients treated at a high complexity university hospital.

As in most studies, the most documented type of psoriasis was plaque, whose phenotype can represent 90% of cases<sup>(11)</sup>, as observed in the present study (88.9%). The most affected body regions were the elbows, the nail and scalp. Elbows are areas of skin folds characteristically associated to psoriasis. On the other hand, nails and scalp are associated with a high probability of developing arthritis in psoriatic patients<sup>(7)</sup>. Furthermore, psoriatic nail is more often seen in patients with cutaneous-articular disease than in patients with only skin disease<sup>(11)</sup>.

A German study that followed 1,511 patients with plaque type psoriasis found that those who developed arthritis had an average of five affected joints. The most affected were the joints of the hands and knees<sup>(12)</sup>. Compared to the present study, it appears that polyarticular disease was also found affecting hands/wrists, feet/ankles and knees. However, the observed number of affected joints was higher with an average of 11.5 ranging 1-51.

The occurrence of extra-articular manifestations is part of the broad clinical spectrum of psoriatic arthritis and at least one expression was observed in 86.7% of patients. The most characteristic is enthesitis, an inflammatory lesion in bone inserts that occurs in 20 to 40% of psoriatic arthritis patients<sup>(6)</sup>. In this study, however, there was a high occurrence of this finding: 75.6%. Dactylitis or "sausage finger" is the representation of

a complete clinical swelling of a hand finger and/or toe and is associated with high rates of erosion in the affected joint site<sup>(3)</sup>. According to the traditional literature, it is a finding that may occur in 30 to 40% of psoriatic arthritis patients over the course of the disease<sup>(6)</sup>. This event occurred in 46.7% of patients in the present study.

## CONCLUSION

Predominant skin disease is plaque type psoriasis on the elbows, scalp and nails. The joint disease is predominantly peripheral, polyterritorial and with strong presence of extra-articular manifestations.

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