





# EVALUATION OF SACROILIITIS BY MAGNETIC RESONANCE IMAGING IN PATIENTS WITH PSORIASIC ARTHRITIS

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## BACKGROUND

Psoriatic arthritis (PA) involves peripheral joints and axial skeleton. The involvement of the sacroiliac joint is a debilitating component in PA. Magnetic resonance imaging (MRI) is an excellent tool for early diagnosis of axial disease considering it is a sensitive method for the detection of inflammatory lesions and characterizes the acute and chronic alterations of sacroiliitis. This study aims to evaluate the prevalence of sacroiliitis by MRI of the axial skeleton (sacroiliac) of patients with psoriatic arthritis, to determine the acute and chronic radiological characteristics of sacroiliitis of these patients.

## MATERIALS AND METHODS

A cross-sectional study was carried out with patients with psoriatic arthritis who were followed up at the outpatient clinic of rheumatology of a tertiary hospital in Fortaleza, Brazil, who underwent MRI examinations of the sacroiliac joints. Two independent evaluators observed the degree of concordance for sacroiliitis by the Kappa coefficient. Clinical symptomatology of sacroiliitis (inflammatory low back pain) was also evaluated.

### RESULTS

Forty five patients were included in the study. The prevalence of sacroiliitis was 37.8% (n=17), being 47% unilateral, and 53% bilateral. The kappa coefficient was 0.64. The main acute structural alterations were subchondral bone edema, with 26.7% (n=12), enthesitis, 20% (n=9), capsulitis, 17.8% (n=8), and synovitis, 8.8% (n=4). Leading chronic findings were periarticular erosions, 26.7% (n=12), fatty metaplasia, 13.3% (n=6), bone sclerosis, 11.1% (n=5), and ankylosis, 2,2% (n=1). Of the 45 patients with psoriatic arthritis, 22% (n = 10) presented with inflammatory low back pain. Among those 17 patients who presented sacroiliitis in the image, only 29.4% (n=5) had inflammatory low back pain.

### CONCLUSION

This study showed a high prevalence of sacroiliitis by MRI in patients with psoriatic arthritis, with the majority of affected patients presenting bilateral findings. The majority of patients with sacroiliitis had no clinical symptoms.