

# Evaluating the extent of agreement between the EARP (Early Arthritis for Psoriatic Patients) and PEST (Psoriasis Epidemiology Screening Tool) questionnaires in screening for psoriatic arthropathy in patients with psoriasis in a tertiary-care dermatology outpatient department

Suyash Singh<sup>1</sup>, Aradhana Sood<sup>2</sup>, Preema Sinha<sup>3</sup>, Rajneesh Joshi<sup>4</sup>, Seema Patrikar<sup>5</sup>, Pankaj Das<sup>6</sup>

<sup>1</sup>Undergraduate student, Armed Forces Medical College, Pune, Maharashtra, India, <sup>2</sup>Professor and HOD Department of Dermatology, Armed Forces Medical College, Pune, Maharashtra, India, <sup>3</sup>Assoc Professor, Department of Dermatology, Armed Forces Medical College, Pune, Maharashtra, India, <sup>4</sup>Professor, Department of Community Medicine, Armed Forces Medical College, Pune, Maharashtra, India, <sup>5</sup>Lecturer in Statistics, Department of Community Medicine, Armed Forces Medical College, Pune, Maharashtra, India, <sup>6</sup>Senior resident, Department of Dermatology, Armed Forces Medical College, Pune, Maharashtra, India

**Corresponding author:** Major Pankaj Das, E-mail: pankaj3609@gmail.com

## ABSTRACT

**Background:** The prevalence of psoriatic arthropathy (PsA) among psoriatic patients ranges from 5% to 42%, with some cases of rapidly progressive disabling arthropathy. If detected early, PsA can be considerably improved by timely therapeutic intervention. Various screening tools have been developed to screen psoriatic patients for arthritis, but there is a paucity of literature on the agreement between the two. **Aim:** Evaluating the extent of agreement between the EARP (Early Arthritis for Psoriatic Patients) and PEST (Psoriasis Epidemiology Screening Tool) questionnaires in screening psoriatic patients for psoriatic arthropathy in a tertiary-care dermatology outpatient department (OPD). **Materials and Methods:** 100 prospective psoriatic patients with no prior diagnosis of PsA reporting to our dermatology OPD were administered EARP and PEST questionnaires. The extent of agreement between the two questionnaires was calculated by Cohen's kappa coefficient. Those positive for PsA by one or both of the questionnaires were evaluated using the CASPAR criteria. **Results:** 43 patients were positive for PsA by EARP, whereas 13 patients were positive by PEST; and all of these 13 patients were EARP positive as well. All the patients who were either EARP or PEST positive continued to meet the CASPAR criteria, showing a positive predictive value of 100% for both questionnaires. The extent of agreement between EARP and PEST was found to be low (0.312). **Conclusion:** EARP is a better screening tool for PsA than PEST, as the latter failed to screen positively a significant number of psoriatic patients for psoriatic arthropathy. The extent of agreement between the two questionnaires can, thus, be considered poor.

**Key words:** Psoriasis; Psoriatic arthropathy; EARP; PEST; CASPAR

## INTRODUCTION

Psoriasis is a common chronic relapsing inflammatory disease with dermatological as well as systemic

manifestations. The estimated worldwide prevalence of psoriasis ranges from 0.51% to 11.43%, while the prevalence in India varies from 0.44% to 2.8% [1,2]. Psoriasis is currently considered a multisystem disorder

**How to cite this article:** Singh S, Sood A, Sinha P, Joshi R, Patrikar S, Das P. Evaluating the extent of agreement between the EARP (Early Arthritis for Psoriatic Patients) and PEST (Psoriasis Epidemiology Screening Tool) questionnaires in screening for psoriatic arthropathy in patients with psoriasis in a tertiary-care dermatology outpatient department. *Our Dermatol Online.* 2020;11(4):346-350.

**Submission:** 05.01.2020; **Acceptance:** 06.03.2020

**DOI:** 10.7241/ourd.20204.3