

A study of intima media thickness and their cardiovascular risk factors in patients with Psoriatic arthritis

ABSTRACT

INTRODUCTION: Psoriatic Arthritis (PsA) is an inflammatory arthritis associated with Psoriasis. Its recognition as an inflammatory disease distinct from Rheumatoid Arthritis has put forward for consideration several questions regarding its specific CVS mortality and morbidity (9, 11, 16, 26). Carotid intima media thickness is a useful surrogate and sensitive marker to determine atherosclerosis even in its subclinical stages (6, 14, 22, 27, 32). **OBJECTIVE:** Prevalence of carotid intima media thickness in patients with Psoriatic arthritis is unknown in Asian population. We aim to identify the presence of subclinical atherosclerosis in patients with psoriatic arthritis and disease activity association and its predictors in a series of patients with PsA attended to the rheumatology clinic, tertiary hospitals. **METHODS:** A total of 63 patients with PsA who fulfilled the CASPAR criteria were recruited from UKM Medical Centre and Hospital Putrajaya. Common carotid intima media thickness (IMT) was measured in both right and left carotid artery by using high resolution B-mode ultrasound. This was a cross sectional study first done in Malaysia for PsA patients. **RESULTS:** The positive IMT (IMT > 1.00 mm) among PsA was observed in 10 out of 63 patients (15.9 %) regardless of background cardiovascular risk. The mean +/- SD of IMT was 0.725 +/-0.260 mm for this study. Variables significantly associated with positive IMT ($p < 0.05$) included age at the time of study ($p = 0.005$), waist circumference ($p = 0.001$), Hypertension ($p = 0.007$), Diabetes ($p = 0.002$) and Metabolic syndrome ($p = 0.001$) and not associated with gender, ethnicity, duration of PsA disease, pattern of PsA, disease activity and severity. Above all, only age had positive IMT independent predictor ($p = 0.032$), with OR 1.116; 95 % CI (1.010-1.234). **CONCLUSIONS:** There was a significant association between CVS risk and positive Intima Media Thickness in Psoriatic Arthritis patients. Otherwise, there was no association in disease activity, disease severity and DMARDS therapy with positive Intima Media Thickness in Psoriatic Arthritis patients. The study was approved by Research and Ethics Committee of the faculty of medicine, Universiti Kebangsaan Malaysia with project code FF-114-2008 and by Community Research Center (CRC) of National Institutes of Health (NIH) for the case study in Hospital Putrajaya with the project code NMRR-08-970-2125.

Keyword: Intima media thickness; Cardiovascular; Psoriatic arthritis