

ABSTRAK

**HUBUNGAN KADAR KALSIDIOL (25(OH)D) SERUM DENGAN
AKTIVITAS PENYAKIT (SKOR DAPSA) PADA PASIEN ARTRITIS
PSORIATIK**

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Latar belakang : Arthritis psoriatik (PsA) adalah penyakit inflamasi sendi kronik berkaitan dengan lesi kulit psoriasis. Faktor resiko lingkungan yang akhir-akhir ini diduga berperan dalam patogenesis PsA adalah vitamin D. Vitamin D, selain memiliki fungsi utama mengatur keseimbangan kalsium dan fosfat, juga berperan sebagai imunomodulator. Hipovitaminosis D sering ditemukan pada penderita PsA. Meskipun demikian, belum didapatkan hubungan yang jelas antara kadar vitamin D dengan aktifitas penyakit PsA.

Tujuan : Menentukan adanya hubungan antara kadar 25(OH)D serum dengan aktifitas penyakit PsA pada pasien rawat jalan poliklinik reumatologi RSUD Dr. Soetomo Surabaya.

Metode : Penelitian observasional dengan desain analitik *cross sectional* melibatkan 34 subyek penelitian PsA yang didiagnosis berdasarkan CASPAR. Populasi adalah pasien PsA di Instalasi Rawat Jalan RSUD Dr Soetomo Surabaya. Variabel independen adalah kadar 25(OH)D serum, variabel dependen adalah aktifitas penyakit PsA. Kadar 25(OH)D diperiksa menggunakan metode CMIA, aktifitas penyakit PsA diukur menggunakan sistem skor DAPSA.

Hasil : Dari 34 subyek penelitian didapatkan 9 laki-laki dan 25 perempuan. Median umur 49,5 (20-60) tahun. Kadar 25(OH)D menurun yaitu dengan rerata $17,06 \pm 6,51$ ng/mL. Defisiensi 25(OH)D ditemukan pada 23 pasien (67,6%), insufisiensi 25(OH)D ditemukan pada 11 pasien (32,4 %) dan tidak didapatkan pasien dengan kadar 25(OH)D normal. Rerata skor DAPSA didapatkan $24,25 \pm 3,99$. Mayoritas subyek penelitian dengan aktifitas penyakit sedang sebanyak 29 orang (85,3%), sisanya termasuk aktifitas berat sebanyak 5 orang (14,7%). Tidak didapatkan subyek dengan skor aktifitas penyakit remisi dan ringan. Ditemukan korelasi yang signifikan antara kadar 25(OH)D dengan skor DAPSA ($r = -0,56$, $p = 0,001$).

Kesimpulan : Ditemukan korelasi negatif yang bermakna antara kadar 25(OH)D serum dengan aktifitas penyakit berdasarkan skor DAPSA pada pasien PsA.

Kata kunci : 25(OH)D, arthritis psoriatik, aktifitas penyakit, DAPSA, PsA.

ABSTRACT

THE ASSOCIATION BETWEEN SERUM CALCIDIOL (25(OH)D) LEVEL AND DISEASE ACTIVITY (DAPSA SCORE) IN PSORIATIC ARTHRITIS PATIENTS

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Background : Psoriatic arthritis (PsA) is a chronic inflammatory joint disease which develops in patients with psoriasis. The environmental risk factor that has recently been suggested to play a role in pathogenesis of PsA is vitamin D. Vitamin D, besides its function as main regulator for calcium and phosphate homeostasis, also acts as an immunomodulator. Hypovitaminosis D is often found among PsA patients. However, the association between vitamin D level and PsA disease activity is still in debate.

Objective : This study aims to determine the correlation between serum 25(OH)D level and PsA disease activity in Outpatient Installation of Dr Soetomo General Hospital Surabaya.

Methods: An cross-sectional study involving 34 PsA patients diagnosed based on CASPAR. The population was PsA patients in the Outpatient Installation of Dr. Soetomo Hospital Surabaya. Independent variable is the level of 25(OH)D serum, dependent variable is disease activity of PsA. Serum 25(OH)D levels were examined using the CMIA method, PsA disease activity was measured using a DAPSA score system.

Results : Total of 34 patients, 9 male and 25 female subjects, median age was 49,5 (20-60) years. Serum 25(OH)D was decreased with mean $17,06 \pm 6,51$ ng/mL. 25(OH)D deficiency was found in 23 patients (67,6%), 25(OH)D insufficiency was found in 11 patients (32,4%) and there were no patient with normal 25(OH)D level. Mean of DAPSA score was $24,25 \pm 3,99$. 29 patients (85,3%) had moderate disease activity, 5 patients (14,7%) high disease activity and there were no subjects with remission and mild disease activity. A significant correlation was found between 25(OH)D levels and DAPSA score ($r = -0.56$, $p = 0.001$).

Conclusions : There is significant negative correlation between 25(OH)D level and PsA disease activity based on DAPSA score.

Keywords: 25(OH)D, psoriatic arthritis, disease activity, DAPSA, PsA.