Kadar 25-hidroksivitamin D total pada berbagai derajat lesi Tuberkulosis Paru = The concentration of total 25 hydroxyvitamin-D at different degree of Pulmonary Tuberculosis lesions

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Abstrak

ABSTRAK
Banyak studiBanyak studi epidemiologi, klinis dan in vitro terakhir menunjukkan hubungan antara vitamin D dengan tuberkulosis (TB) paru. Kadar 25-hidroksivitamin D (25(OH)D) yang rendah berhubungan dengan penyakit TB paru aktif dan laten. Namun, sampai saat ini belum ada data mengenai hubungan kadar 25(OH)D dan status vitamin D dengan derajat lesi TB paru. Tujuan penelitian ini dilakukan untuk mendapatkan hubungan antara proporsi status vitamin D dan kadar 25(OH)D dengan derajat lesi TB paru ringan, sedang dan berat. Desain penelitian potong lintang, terdiri dari 137 pasien TB paru terbagi menjadi kelompok derajat lesi TB paru ringan, sedang dan berat masing-masing 46, 47 dan 44 pasien. Diagnosis TB paru berdasarkan Pedoman Nasional Pengendalian Tuberkulosis, Kementerian Kesehatan Republik Indonesia. Derajat lesi TB paru dinilai secara radiologis berdasarkan klasifikasi dari National Tuberculosis and Respiratory Disease Association, New York. Status vitamin D ditetapkan menurut rekomendasi Holick. Pada ketiga kelompok dicatat data karakteristik subjek dan dilakukan pemeriksaan 25(OH)D. Status vitamin D pada subjek penelitian ini didapatkan sebanyak 122(89,1%) defisiensi dan 15(10,9%) insufiensi vitamin D. Proporsi defisiensi dan insufisiensi vitamin D kelompok TB paru ringan, sedang dan berat tidak didapatkan perbedaan bermakna, masing-masing dengan 84,8% dan 15,2%; 91,5% dan 8,5%; 90,9% dan 9,1%. Kadar 25(OH)D kelompok TB paru ringan, sedang dan berat tidak berbeda bermakna, masing-masing dengan rerata 12,96 (SB±5,83)ng/mL, 12,42 (SB±5,13)ng/mL, dan 11,29 (SB±5,61)ng/mL. Kami menyimpulkan status vitamin D dan kadar 25(OH)D tidak berhubungan dengan derajat lesi TB paru. Proporsi defisiensi dan insufisiensi vitamin D kelompok TB paru ringan, sedang dan berat tidak didapatkan perbedaan bermakna, masingmasing dengan 84,8% dan 15,2%; 91,5% dan 8,5%; 90,9% dan 9,1%.
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ABSTRACT
Most recent epidemiological, clinical and in vitro studies indicate that there is a the relationship between vitamin D and pulmonary tuberculosis (TB). Low concentration of 25-hydroxyvitamin D (25(OH)D) is associated with active and latent pulmonary TB disease. Nevertheless, there is no data about the relationship between vitamin D status and concentrations of 25(OH)D with severity of pulmonary TB. The aim of this study was to obtain the relationship between proportions of vitamin D and concentrations 25(OH)D with mild, moderate and severe degrees of pulmonary TB lesions. This was a cross-sectional study, 137 patients with pulmonary TB and 46, 47 and 44 patients each of mild, moderate and severe degree of pulmonary TB lesions, respectively. Diagnosis of pulmonary TB was based on

National Tuberculosis Control Guideline, Ministry of Health of the Republic of Indonesia. The degree of pulmonary TB lesion was radiologically assessed based on classifications of the National Tuberculosis and Respiratory Disease Association, New York. Vitamin D status was defined according to Holick recommendations. Baseline characteristics of subjects were recorded and 25(OH)D concentrations were measured in subjects of each groups. Vitamin D status of the subjects were 122 (89.1%) deficiency and 15 (10.9%) insufficiency of vitamin D. The proportions of vitamin D deficiency and insufficiency at mild, moderate and severe degree of pulmonary TB lesions were also not significantly different, i.e. 84.8% and 15.2%, 91.5% and 8.5%, 90.9% and 9.1%, respectively. Concentrations of 25 (OH) D in each group of mild, moderate and severe pulmonary TB lesions were not significantly different, with a mean (SD) 12.96 (5.83)ng/mL, 12.42 (5.13)ng/mL, and 11.29 (5.61)ng/mL respectively. It is concluded that vitamin D status and serum 25 (OH) D were not related to the degree of pulmonary TB lesion. The proportion of vitamin D deficiency and insufficiency at mild, moderate and severe degree of pulmonary TB lesions were also not significantly different, i.e. 84.8% and 15.2%, 91.5% and 8.5%, 90.9% and 9.1%, respectively.