Korelasi antara kadar vitamin C serum dengan kadar superoksida dismutase eritrosit pada penderita HIV/AIDS di RSUPNCM Jakarta = Correlation between serum vitamin C with eritrocyte superoxide dismutase of HIV/AIDS patients in RSUPNCM

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Abstrak

Tujuan penelitian adalah untuk mengetahui korelasi antara kadar vitamin C serum dengan kadar SOD eritrosit pada penderita HIV/AIDS . Penelitian dilakukan di UPT HIV RSUPNCM Jakarta mulai bulan Februari sampai Maret 2013. Penelitian ini merupakan studi potong lintang terhadap 52 orang penderita HIV. Data yang diambil meliputi data karakteristik subyek berdasarkan usia, jenis kelamin dan pendidikan, asupan energi, asupan vitamin C, status gizi, riwayat pengobatan ARV, jumlah limfosit T CD4. Dilakukan pemeriksaan laboratorium untuk mengukur kadar vitamin C serum dan kadar SOD eritrosit. Analisis korelasi menggunakan uji Pearson dengan kemaknaan p<0,05. Hasil: Subyek penelitian 25 perempuan dan 27 laki-laki, rerata usia 33,60±4,84 tahun. 80,8% berada dalam rentang usia 30–40 tahun dan 82,7% berpendidikan sedang. Asupan energi 76,9% kurang dengan rerata untuk perempuan 1700,41±316,25kkal/hari dan rerata laki-laki 1996,33±525,72kkal/hari. Asupan vitamin C 100% kurang dengan rerata untuk perempuan 46,62±15,66mg/hari dan laki-laki 46,97±13,39mg/hari. Status gizi 44,2% cukup dan 40,4% lebih dengan rerata IMT 21,98±3,48kg/m2. Sebanyak 94,2% sudah mendapat ARV dan jumlah limfosit T CD4 terbanyak berada pada kategori II CDC (200–499sel/?L) yaitu sebanyak 63,5% dengan median 245(50–861)sel/?L. Kadar vitamin C serum sebanyak 92,3% dalam kategori rendah dengan median 0,23(0,10–0,56)mg/dL. Kadar SOD eritrosit terbanyak (53,8%) dalam kategori normal dengan rerata 1542,10±5,42U/gHb. Terdapat korelasi negatif lemah yang tidak bermakna antara kadar vitamin C serum dengan kadar SOD eritosit (r= 0,109 dan p=0,442)

.....The objective of this study was to investigate the correlation between serum vitamin C concentration and erythrocyte SOD concentration of HIV/AIDS patients. Study was conducted at UPT HIV/AIDS RSUPNCM from February to March 2013. The study was a cross sectional study of 52 HIV/AIDS patients. Data collected including subject characteristic age, sex, education, energy intake by food record 2x24 hour, vitamin C intake by FFQ semikuantitatif, nutritional status, history of ART, and CD4 lymphocyte count. Conducted laboratory tests to measure serum vitamin C concentration and erythrocyte SOD concentration. Statistical analysis was done using Pearson’s correlation test.

Result: Subject consisted of 27 men and 25 women, mean of age 33.60±4.84years old. 80.8% age in range 30–40years old. 82.7% were medium education level. 76.9% subject had low energy intake, mean 1700.41±316.25kcal/day for women and mean

1996.33±525.72kcal/day for men. 100% subject had low vitamin C intake with mean 46.62±15.66mg/day for women and 46.97±13.39mg/day for men. . Nutritional status of 44.2% had normal and 40.4% over enough with a mean BMI 21.98±3.48 kg/m2. 94.2% had ART and 63.5% lymphocyte count at category II CDC with mean 245(50–861)cell/?L. 92.3% subyek had low serum vitamin C concentration with median 0.23(0.10–0.56)mg/dL. 53.8% subject had normal erythrocyte SOD concentration with mean 1542.10±5.42U/gHb. There was no correlation between serum vitamin C and erythrocyte SOD. (r=0.109 and p=0.442)