Hubungan Kadar Serum 25-hydroxyvitamin D dan Sun Index (Indeks Pajanan Matahari) dengan Jumlah dan Ukuran Lesi Keratosis Seboroik pada Wajah di Poliklinik Kulit dan Kelamin, RSUPN Dr. Cipto Mangunkusumo = The Correlation between 25-hydroxyvitamin D Level and Sun Index with Number and Size of Seborrheic Keratoses Lesions on The Face in Dermatovenereology Clinic, Dr. Cipto Mangunkusumo National General Hospital

Arinia Kholis Putri, author

Abstrak

Latar belakang: Keratosis seboroik (KS) merupakan salah satu tumor jinak epidermis yang paling sering ditemukan. Pada penelitian baru mengenai KS, vitamin D berperan melalui banyak mekanisme nongenomik, termasuk ekspresi protein dan mutasi gen FGFR3. Defisiensi vitamin D mengakibatkan gangguan proliferasi dan diferensiasi, sehingga mempengaruhi jumlah dan ukuran lesi KS. Di sisi lain pajanan matahari juga merupakan faktor yang mempengaruhi baik kadar serum 25-hydroxyvitamin D (25(OH)D) maupun terhadap munculnya lesi KS. Pengukuran pajanan sinar matahari dapat dilakukan dengan berbagai cara, salah satunya dengan menggunakan sun index. Sampai saat ini belum ada penelitian mengenai hubungan antara kadar serum 25(OH)D dan sun index dengan jumlah dan ukuran lesi KS.
Tujuan: Mengetahui hubungan kadar serum 25-Hydroxyvitamin D dan sun index (indeks pajanan matahari) dengan jumlah dan ukuran lesi keratosis seboroik pada wajah di Poliklinik Kulit dan Kelamin, RSUPN Dr. Cipto Mangunkusumo
Metode: Penelitian potong lintang ini melibatkan 50 pasien KS yang direkrut secara consecutive sampling pada bulan Desember 2018 hingga Mei 2019. Pasien yang memenuhi kriteria akan dilakukan anamnesis dan pengisian kuesioner sun index, pemeriksaan fisis, penilaian jumlah dan ukuran terbesar lesi KS di wajah dengan FotoFinder® dan dermoskopi, serta pemeriksaan laboratorium kadar serum 25(OH)D. Dilakukan analisis data untuk mengetahui korelasi kadar serum 25(OH)D dan sun index dengan jumlah dan ukuran terbesar lesi KS pada wajah dengan uji Pearson jika sebaran data normal atau uji Spearman jika sebaran data tidak normal.
Hasil: Median kadar serum 25(OH)D SP sebesar 10,3 (3,9-24,2) ng/mL. Median nilai sun index adalah 1,3 (0,3-16,2). 94% SP mengalami defisiensi kadar serum 25(OH)D dan 6% mengalami insufisiensi kadar serum 25(OH)D. Terdapat korelasi bermakna dengan kekuatan sedang antara kadar serum 25(OH)D dengan sun index (p=0,009, r=0,367). Median jumlah lesi KS pada wajah sebesar 28 (8-87) lesi dan meningkat sesuai dengan peningkatan kelompok usia. Median ukuran terbesar lesi KS sebesar 3,5(1-9,5) mm dan meningkat sesuai dengan peningkatan kelompok usia. Tidak terdapat korelasi antara kadar serum 25(OH)D dengan jumlah dan ukuran terbesar lesi KS pada wajah (p=0,178, r=0,194 dan p=0,164, r=0,2). Terdapat korelasi bermakna antara sun index dengan jumlah dan ukuran terbesar lesi KS pada wajah (p<0,001, r=0,517 dan p<0,001, r=0,451)
Kesimpulan: Kadar serum 25(OH)D ditemukan di bawah nilai normal (defisiensi dan insufisiensi) pada seluruh SP. Hasil penelitian membuktikan bahwa semakin tinggi kadar serum 25(OH)D, tidak menyebabkan semakin sedikit jumlah dan semakin kecil ukuran lesi KS di wajah. Namun semakin tinggi nilai sun index,

maka akan menyebabkan semakin banyak jumlah dan semakin besar ukuran lesi KS di wajah
.....Background: Seborrheic keratoses (SK) is one of the most common benign epidermal tumors. Recent study on SK, vitamin D is involved through many nongenomic interactions, including changes in protein and mutations in the FGFR3 gene. Decreased on vitamin D causes disorder of proliferation and differentiation, thus affecting the number and size of SK lesions. On the other hand, sun exposure is also a factor that affects the levels of 25-hydroxyvitamin D (25(OH)D) as well as the SK lesions. Measurement of sunlight exposure can be done in various ways, one of them is by using the sun index. Until now there has been no research on the relationship between 25(OH)D serum and sun index with the number and size of SK lesions.
Objective: To assess the relationship of 25-hydroxyvitamin D levels and sun index (sun exposure index) with number and size of seborrheic keratoses lesions on the face in Dermatovenereology Clinic , Dr. Cipto Mangunkusumo National General Hospital.
Methods: This cross-sectional study involved 50 SK patients that recruited by consecutive sampling in December 2018 to May 2019. Patients who met the criteria will be analyzed and filled in with the sun index questionnaire, physical examination, assessment of the number and size of SK lesions on the face with FotoFinder® and dermoscopy, and laboratory tests for 25(OH)D serum levels. Data analysis was performed to determine the correlation of serum 25 (OH) D and sun index levels with the number and size of SK lesions on the face with Pearson test if the data distribution is normal or Spearman test if the data distribution is not normal.
Result: The median 25(OH)D serum level is 10.3 (3.9-24.2) ng/mL. The median sun index value is 1.3 (0.3-16.2). 94% of SP had deficiencies and 6% experienced insufficiency of serum 25(OH)D levels. There was a significant correlation with moderate strength between 25(OH)D serum levels and sun index ($p = 0.009$, $r = 0.367$). The median number of SK lesions on the face was 28 (8-87) lesions and increased according to the increase in age groups. The median largest size of SK lesions was 3.5 (1-9.5) mm and increased according to the increase in age groups. There is no correlation between 25(OH)D serum levels and the largest number and size of SK lesions on the face ($p = 0.178$, $r = 0.194$ and $p = 0.164$, $r = 0.2$). There is a significant correlation between the sun index and the largest number and size of SK lesions on the face ($p <0.001$, $r = 0.517$ and $p <0.001$, $r = 0.451$)
Conclusion: 25(OH)D serum levels were found below normal (deficiency and insufficiency) in all subject. The results showed that the higher 25(OH)D serum levels did not cause the smaller the number and the smaller the size of KS lesions on the face. But higher sun index value correlate on the number and size of SK lesions on the face.