

## HUBUNGAN KADAR 25-HIDROXYVITAMIN D SERUM DENGAN DERAJAT KEPARAHAAN VITILIGO

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### **Abstrak**

**Latar belakang:** Vitiligo merupakan suatu gangguan pigmentasi, ditandai dengan adanya depigmentasi kulit berupa makula hipopigmentasi disebabkan karena hilangnya fungsi melanosit epidermis secara kronik dan progresif. Penyebab vitiligo multifaktorial, patogenesisnya masih belum jelas dan salah satu etiopatogenesisnya adalah defisiensi vitamin D. Terdapat beberapa penelitian yang telah dilakukan untuk mengetahui hubungan vitamin D dan vitiligo dengan hasil yang bervariasi. Penelitian ini mencari hubungan antara kadar 25-hidroxyvitamin D serum dengan derajat keparahan vitiligo

**Tujuan penelitian:** Untuk mengetahui adanya hubungan kadar 25-hidroxyvitamin D serum dengan derajat keparahan vitiligo

**Subjek dan metode penelitian:** Tujuh belas pasien dengan vitiligo berusia > 18 tahun sebagai subjek penelitian. Kriteria ekslusi: pasien vitiligo mendapat terapi topikal, fisik, terapi sistemik, menderita penyakit seperti diabetes melitus, gangguan fungsi tiroid, fungsi hati, fungsi ginjal, psoriasis, dermatitis atopik, *SLE*, *rheumatoid arthritis*, sklerosis multipel, keganasan, riwayat keluarga vitiligo (genetik), bekerja di lapangan/ di luar ruangan, terpapar matahari dari rentang waktu jam 10 pagi- 2 siang, anak-anak, ibu hamil dan menyusui. Dilakukan penghitungan skor VASI, dan pemeriksaan kadar 25-hidroxyvitamin D serum dengan metode ELISA.

**Hasil penelitian:** Usia rerata pasien vitiligo pada penelitian ini adalah  $44,94 \pm 14,23$  tahun, dengan jenis kelamin terbanyak adalah perempuan (82,4%). Usia awitan terbanyak adalah pada usia 21-30 tahun (35,3%). Jenis vitiligo terbanyak adalah vitiligo vulgaris (64,7%) dengan derajat keparahan terbanyak adalah derajat ringan (58,8%). Rerata kadar 25-hidroxyvitamin D serum adalah  $99,35 \pm 58,58$  ng/mL. Hubungan kadar 25-hidroxyvitamin D serum dengan skor VASI dan derajat keparahan vitiligo menunjukkan korelasi negatif namun tidak bermakna secara statistik.

**Kesimpulan:** Tidak terdapat hubungan yang bermakna antara kadar 25-hidroxyvitamin D serum dengan derajat keparahan vitiligo, namun terdapat kecenderungan korelasi negatif yang tidak bermakna secara statistic. Diperlukan penelitian lebih lanjut dengan jumlah sampel yang lebih besar dan metode cross sectional comparative untuk hasil yang bermakna.

**Kata kunci:** kadar 25-hidroxyvitamin D serum, derajat keparahan vitiligo

## **THE CORRELATION BETWEEN 25-HIDROXYVITAMIN D SERUM LEVEL AND VITILIGO SEVERITY**

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### **Abstract**

**Background:** Vitiligo is a pigmentary disorders, characterized by skin depigmentation as hipopigmented macule caused by disappearing of chronically and progressive epidermis melanocyte function. The etiology of vitiligo is multifactorial, the pathogenesis is still unclear, and one of the etiology is vitamin D deficiency. Some studies have been done to determine the correlation between vitamin D and vitiligo, with various results. This study is conducted to investigate correlation between 25-hydroxyvitamin D serum level and vitiligo severity.

**Aim:** to determine the correlation between 25-hydroxyvitamin D serum level and vitiligo severity

**Subjek dan metode penelitian:** Seventeen vitiligo patient aged > 18 year were included in the study group. Exclusion criterias: vitiligo patient who got topical, physical, systemic treatment, history of having diabetes mellitus, thyroid function, hepar function and kidney disorders, psoriasis, atopic dermatitis, SLE, rheumatoid arthritis, multiple sclerosis, malignancy, family history of vitiligo (genetic), working outdoor, exposure to sun from 10.00 morning- 14.00 afternoon, children, pregnancy and lactation. VASI score was recorded, and 25-hydroxyvitamin D serum level was measured by ELISA methode.

**Result:** Mean aged of vitiligo in this study was  $44,94 \pm 14,23$  year-old, and sex majority was woman (82,4%). The most onset was in 21-30 year-old (35,3%). Vitiligo vulgaris was the most type of vitiligo (64,7%) with the most common severity of vitiligo was mild (58,8%). The mean serum level of 25-hydroxyvitamin D was  $99,35 \pm 58,58$  ng/mL. The correlation between 25-hydroxyvitamin D serum level and severity of vitiligo showed negative correlation but not significant statistically.

**Conclusion:** There was no significant correlation between 25-hydroxyvitamin D serum level and vitiligo severity, but there is negative correlation trend that statistically not significant. Further study is needed with bigger sample and cross sectional comparative method to get significant result.

**Keyword:** 25-hydroxyvitamin D serum level, vitiligo severity