Hubungan antara Kadar 25(OH)D Serum dan Status Kecukupan Vitamin D dengan Derajat Keparahan Alopesia Androgenetik pada Laki-laki = Association of 25(OH)D Serum Levels and Vitamin D Status with The Severity Levels of Androgenetic Alopecia in Men

Raissa, author

Abstrak

Latar belakang: Alopesia androgenetik (AAG) merupakan jenis kebotakan rambut paling umum pada laki-laki yang menyebabkan gangguan estetik sehingga memengaruhi kualitas hidup dan dapat berkaitan dengan kondisi sistemik. Tata laksana yang ada seringkali belum memuaskan. Vitamin D sebagai salah satu mikronutrien yang telah dikenal memiliki banyak manfaat juga diduga berperan dalam kejadian kelainan rambut termasuk AAG.
Tujuan: Penelitian ini bertujuan untuk menganalisis hubungan antara kadar 25(OH)D serum dan status kecukupan vitamin D dengan derajat keparahan AAG pada laki-laki.
Metode: Penelitian ini merupakan suatu studi observasional analitik dengan desain potong lintang. Subjek penelitian dipilih menggunakan metode consecutive sampling berdasarkan kriteria penelitian. Diagnosis AAG ditegakkan secara klinis berdasarkan klasifikasi Hamilton-Norwood lalu dibagi menjadi derajat ringan dan sedang-berat. Dilakukan pula fotografi 7 posisi kepala serta pemeriksaan trikoskopi dan Trichoscan®. Pemeriksaan kadar 25(OH)D serum diambil dari darah vena sebanyak 3 mL dan menggunakan metode chemiluminescent microparticle immunoassay (CMIA). Klasifikasi status kecukupan vitamin D ditetapkan menjadi defisiensi dan nondefisiensi berdasarkan Endocrine Society Guideline. Nilai $p<0,05$ dianggap bermakna secara statistik.
Hasil: Di antara 74 SP dengan rerata usia 37,4(8,89) tahun yang berpartisipasi dalam penelitian, sebanyak 29 orang (39,2%) mengalami AAG ringan dan 45 orang (60,8%) mengalami AAG sedang hingga berat. Rerata kadar 25(OH)D serum untuk seluruh SP adalah 18,9(5,89) ng/mL yang termasuk ke dalam kategori defisiensi vitamin D. Rerata kadar 25(OH)D serum pada SP dengan AAG ringan adalah 21,8(6,39) ng/mL dan pada AAG sedang hingga berat sebesar 17,1(4,79) ng/mL. Terdapat hubungan bermakna secara statistik antara kadar 25(OH)D serum dan status kecukupan vitamin D dengan derajat keparahan AAG ($p=0,01$; $p<0,001$). Sebagai data tambahan, ditemukan pula hubungan bermakna secara statistik antara diameter rambut ($p=0,036$) dengan derajat keparahan AAG.
Kesimpulan: Terdapat hubungan bermakna antara status kecukupan vitamin D dengan kadar 25(OH)D serum dengan derajat keparahan AAG pada laki-laki.
.....Background: Androgenetic alopecia (AGA) is the most common type of hair loss in men which causes aesthetic disturbances that affect quality of life and can be associated with systemic conditions. Existing management is often not satisfactory. Vitamin D, as a micronutrient that is known to have many benefits, is also thought to play a role in the incidence of hair disorders including AGA.
Objective: This study aims to analyze the association between serum 25(OH)D levels and vitamin D sufficiency status with the severity of AGA in men.
Method: This research is an observational analytic study with a cross-sectional design. The study subjects were selected using consecutive sampling. The diagnosis of AGA was established clinically according to the

Hamilton-Norwood classification and then categorized into mild and moderate-severe degrees. Photographs of the head in seven positions were taken, and trichoscopy and Trichoscan® examinations were performed. Serum 25(OH)D levels were measured from 3 mL of venous blood using the chemiluminescent microparticle immunoassay (CMIA) method. Vitamin D status was classified as deficient or non-deficient according to the Endocrine Society Guideline. Statistical significance were set at $p<0.05$.
Results: Among the 74 subjects with a mean age of 37.4 (8.89) years, 29 (39.2%) had mild AGA and 45 (60.8%) had moderate to severe AGA. The mean serum 25(OH)D level for all participants was 18.9 (5.89) ng/mL, indicating vitamin D deficiency. For those with mild AGA, the mean serum 25(OH)D level was 21.8 (6.39) ng/mL, while for those with moderate to severe AGA, it was 17.1 (4.79) ng/mL. There was a statistically significant association between serum 25(OH)D levels and vitamin D status with AGA severity ($p=0.01$; $p<0.001$). Additionally, a significant association was found between hair diameter and AGA severity ($p=0.036$).
Conclusion: This study found significant association between vitamin D status and serum 25(OH)D levels with AGA severity in men