Perbandingan Kadar Feritin Serum dan Bersi Total pada Rambut Antara Pria dengan Alopesia Androgenetik dan Non-Alopesia: Korelasi Terhadap Diameter dan Densitas Rambut = Comparison Of Serum Ferritin and Hair Iron Concentration Between Alopecia Androgenetic and Non-alopecia Men in Correlation with Hair Diameter And Density

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Abstrak

Latar belakang: Alopesia androgenetik (AAG) adalah kebotakan rambut yang paling umum, ditandai dengan miniaturisasi progresif tanpa jaringan parut pada pria, akibat kerentanan terhadap hormon androgen. Penyakit ini terjadi secara multifaktorial, dari faktor genetik, lingkungan dan hormon androgen. Penyakit ini menyebabkan gangguan kosmetik yang mempengaruhi kualitas hidup dan rasa percaya diri. Hingga saat ini belum ada data mengenai kadar ferritin serum dan rambut pada pria dengan AAG yang dibandingkan dengan kelompok non-alopesia dan dikaitkan dengan densitas dan diameter rambut. Penelitian ini bertujuan menganalisis perbedaan kadar feritin serum dan besi total rambut pada populasi AAG dan non-alopesia. Metode: Penelitian ini merupakan suatu studi analitik observasional potong lintang antara dua kelompok. 33 pria dengan diagnosis alopesia androgenetik dan 33 pria tanpa alopesia androgenetik diikutsertakan dalam penelitian ini. Diagnosis alopesia androgenetik ditegakkan secara klinis. Kadar feritin serum dan total besi rambut pasien dibandingkan antara dua kelompok dan dikorelasikan dengan dengan diameter dan densitas rambut. Hasil: Sebanyak 66 SP mengikuti penelitian dengan median usia 37-38 tahun. Feritin serum dan besi total rambut pada kelompok alopesia androgenetik lebih tinggi dibandingkan kelompok non-alopesia. Median 232 ng/mL, dan 222 ng/mL, Tidak terdapat perbedaan bermakna antara kedua kelompok (p = 0,758). Kadar besi total pada kelompok AAG lebih rendah dibandingkan non-alopesia. (22,65 ng/mL dan 39,67 ng/mL, p= 0,102). Terdapat korelasi positif lemah pada kelompok alopesia androgenetik derajat < 4 terhadap diameter rambut. Kesimpulan: Kadar serum feritin dan besi total rambut pada pria non-alopesia lebih tinggi dibandingkan pria dengan alopesia androgenetik, namun tidak bermakna secara statistik.

.....Background: Androgenetic alopecia (AGA) is the most common nonscarring hair loss disorder in men due to susceptibility to testosterone. AGA is amultifactorial disease, due to genetic, hormonal and environmental influence. AGA causes cosmetic disturbances that affects confidence and quality of life. In women, it has been proven correlation between low ferritin serum and AGA occurrences, however not many studies have proven likewise in men. Till now, not many data provides sufficient correlation between ferritin levels and hair iron concentration in men with control group, associated with hair diameter and density. This study aims to compare the differences of serum ferritin and hair iron content between two populations. Method: This is a cross-sectional analysis of two groups, 33 AGA men and 33 men without AGA were included in this study. Serum ferritin and hair level of iron were measured. Diagnosis of AGA was made clinically. Difference of serum ferritin and hair level of iron was analyzed and correlated with hair diameter and density. Result: 66 men were included in this study. Median age was 37-38 year-old. Ferritin serum (232 ng/mL) and hair iron

(39,67 ng/mL) was slightly higher in control group as compared to alopecia androgenetic group (ferritin 222 ng/mL and hair iron 22,65 ng/mL), but there was no statistically significant result (p = 0,758 and p = 0,102). Hair iron level correlates weakly positive with hair diameter in subgroup analysis. Conclusion: Serum ferritin and hair iron level in non-alopecia population is higher compared to alopecia androgenetic men, but statistically insignificant