

Serum ferritin and hair iron content in correlation to hair diameter and density: a case-control study

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SUPPLEMENTARY MATERIAL

Supplementary Table 1. Holm-Bonferroni method for adjusting multiplicity.

Hypothesis	Crude p-value	Rank	Adjusted p-value/new alpha level	Decision
H ₂	0.102	1	0.05	Failed to reject null hypothesis
H ₁	0.758	2	0.025	Failed to reject null hypothesis

Supplementary Table 2. Multivariate analysis for serum ferritin level and AGA status.

Variables	Coefficient	OR	95% CI	p-value
Serum ferritin level	0.000	1.00	0.996-1.003	0.901
Age	-0.001	0.99	0.936-1.066	0.974
BMI				
<18.5		Ref.		0.270
18.5-22.9	0.74	2.096	0.476-9.219	0.328
23-24.9	1.428	4.172	0.868-20.062	0.075
>25	0.155	1.168	0.194-7.023	0.866
Smoking				
No		Ref.		0.333
History	0.991	2.694	0.725-10.017	0.139
Yes	0.375	1.455	0.359-5.905	0.599

OR, odds ratio; CI, confidence interval; BMI, body mass index.

Supplementary Table 3. Continuation of multivariable analysis to determine the confounding variables.

Variables	Crude OR	Model I	Model II	Model III	Model IV
Serum ferritin level	1.000	1.001	1.000	1.000	1.006
Age		0.984			0.997
BMI					
<18.5			Ref.		Ref.
18.5-22.9			2.018		1.964
23-24.9			3.163		4.987
>25			1.241		1.186
Smoking					
No				Ref.	Ref.
History				1.93	3.557
Yes				1.278	1.641

OR, odds ratio; BMI, body mass index.

Supplementary Table 4. Multivariable analysis for hair iron level and AGA status.

Variables	Coefficient	OR	95% CI	p-value
Hair iron level	0.006	1.006	0.998-1.013	0.143
Age	-0.003	0.997	0.936-1.062	0.932
BMI				
<18.5		Ref.		0.193
18.5-22.9	0.675	1.964	0.457-8.447	0.365
23-24.9	1.607	4.987	1.039-23.942	0.045
>25	0.170	1.186	0.205-6.87	0.849
Smoking				
No		Ref.		0.193
History	1.269	3.557	0.9-14.057	0.070
Yes	0.495	1.641	0.402-6.699	0.490

OR, odds ratio; CI, confidence interval; BMI, body mass index.

Supplementary Table 5. Continuation of multivariable analysis to determine the confounding variables.

Variables	Crude OR	Model I	Model II	Model III	Model IV
Hair iron level	1.003	1.003	1.004	1.004	1.006
Age		0.983			0.997
BMI					
<18.5			Ref.		Ref.
18.5-22.9			1.912		1.964
23-24.9			3.344		4.987
>25			1.259		1.186
Smoking					
No				Ref.	Ref.
History				2.297	3.557
Yes				1.435	1.641

OR, odds ratio; BMI, body mass index.

Supplementary Table 6. Additional data for correlation analysis of serum ferritin levels and total hair iron with hair diameter and density in the AGA group stage ≥ 4 and < 4 .

Variable	Hair diameter		Hair density	
	r	p	r	p
AGA stage ≥ 4				
Serum Ferritin	0.111	0.651	-0.089	0.716
Total hair iron	-0.267	0.270	0.182	0.455
AGA stage < 4				
Serum Ferritin	0.053	0.725	-0.225	0.128
Total hair iron	0.312	0.033	0.180	0.227

AGA, androgenetic alopecia.

Supplementary Table 7. Correlation analysis of serum ferritin to hair iron level.

Variable	Total hair iron	
	r	p
Control serum ferritin	-0.387	0.026
AGA serum ferritin	0.009	0.961