**Thesis Title** Effectiveness of the Combination Treatment of Korean Red

Ginseng and Vitamin B5 in Androgenetic Alopecia

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## **ABSTRACT**

Background: Androgenetic alopecia (AGA) is a common hair loss disorder affecting both men and women, primarily due to dihydrotestosterone (DHT)-induced hair follicle miniaturization. While conventional treatments such as minoxidil and finasteride have been used, their side effects necessitate alternative therapeutic options. Korean Red Ginseng (KRG) and Vitamin B5 have been recognized for their potential hair-regenerative properties.

Objective: This study aims to evaluate the effectiveness and safety of a combination treatment of Korean Red Ginseng and Vitamin B5 in managing androgenetic alopecia.

Methods: A quasi-experimental clinical study was conducted on 12 male participants aged 25-45 years with AGA (Hamilton-Norwood Type I-III). Participants applied a topical hair lotion containing Korean Red Ginseng and Vitamin B5 twice daily for 12 weeks. Hair count was assessed using a Trichoscope at baseline, 4th, 8th, and 12th weeks. The Modified Global Photographic Assessment (MGPA) Score and Patient Satisfaction Score were used to evaluate improvement and satisfaction. Adverse effects were monitored throughout the study.

Results: The mean hair count increased significantly from baseline (19.75  $\pm$  1.35) to the 12th week (22.08  $\pm$  2.23) (p < 0.001). MGPA scores showed a steady improvement, with significant differences observed at the 12th week compared to baseline (p = 0.021). Patient satisfaction scores improved significantly over time (p = 0.005), with 66.7% of participants reporting satisfaction by the 12th week. No adverse effects were recorded during the study period.

Conclusion: The combination of Korean Red Ginseng and Vitamin B5 demonstrated significant improvements in hair count, scalp coverage, and patient satisfaction, with no reported adverse effects. This suggests that it may serve as a safe and effective alternative treatment for androgenetic alopecia. Further research with a larger sample size and extended follow-up is recommended to validate these findings.

**Keywords:** Androgenetic Alopecia, Korean Red Ginseng, Vitamin B5, Hair Growth, Alternative Treatment, Hair Count

