

<b>Thesis Title</b>	Efficacy of 0.1% Topical Finasteride Spray Solution for Male Eyebrow Enhancement: A Randomized, Double-blind, Placebo-controlled, Split-face Comparative Study
<b>Author</b>	Kittinut Chittipornsan
<b>Degree</b>	Master of Science (Dermatology)
<b>Advisor</b>	Bhakinai Temnithikul, M. D.

## ABSTRACT

**Objective:** Eyebrow hypotrichosis is a growing aesthetic concern with limited non-invasive treatment options. Finasteride, a 5-alpha-reductase inhibitor, is effective in androgenetic alopecia through dihydrotestosterone suppression. Given the presence of androgen receptors in eyebrow follicles, topical finasteride may offer localized therapeutic benefit. However, no clinical studies have assessed its use for eyebrow enhancement. This pilot trial aimed to evaluate the efficacy and safety of 0.1% topical finasteride spray in men with mild to moderate eyebrow hypotrichosis.

**Materials and Methods:** In a randomized, double-blind, placebo-controlled, split-face study, eight healthy Thai males applied 0.1% topical finasteride to one eyebrow and placebo to the contralateral side twice daily for 12 weeks. Primary outcome was photographic assessment using the Global Eyebrow Assessment (GEBA) scale. Secondary outcomes included eyebrow hair count, hair diameter, patient satisfaction, and safety monitoring.

**Results:** Eight male participants (mean age  $37.9 \pm 2.5$  years) completed the study. The finasteride-treated side showed significantly higher global photographic scores than placebo from week 4 onward ( $p=0.008$  to  $0.002$ ), with a mean score of  $2.0 \pm 0.76$  at weeks 8 and 12. Hair count increased significantly in the finasteride group. Mean hair shaft diameter showed no significant change in either group. No serious adverse events occurred; with only mild transient pruritus reported in isolated cases during the trial.

Conclusions: Topical 0.1% finasteride appears to be a safe, non-invasive option for enhancing male eyebrow density. These results support further investigation in larger, more diverse populations, with integrated assessment of both clinical efficacy and aesthetic perception.

**Keywords:** Eyebrow Hypotrichosis, Male Eyebrow Enhancement, Topical Finasteride, Placebo, Split-face Study

