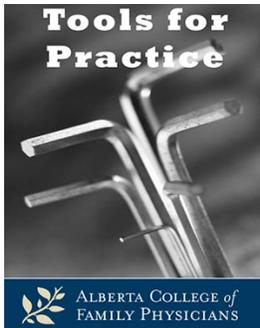


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## Drugs for male- and female-pattern baldness: Just a hair bit more effective than doing nothing?

**Clinical Question: What is the effect of approved medications for androgenic alopecia in men and women?**

**Bottom-line: For men using finasteride or minoxidil, one in 4-8 more than placebo will notice at least slight improvement in hair count over 6-12 months, with no clear evidence one is better. For every 84 men taking finasteride for hair loss, one extra will experience erectile dysfunction. For women, only minoxidil improves hair count, with one in eight reporting a moderate improvement over placebo.**

**Evidence:** Results statistically significant unless indicated.

- Men:
  - Finasteride: Systematic review<sup>1</sup> (12 randomized controlled trials (RCTs), 3,927 men) of finasteride 1-5 mg/day versus placebo found:
    - At least slight improvement in hair count at 3-12 months, 43% versus 26%, Number Needed to Treat (NNT)=6.
      - At 24-60 months, NNT=4.
    - Increase in hair counts at balding spots.
      - 9% at 3-12 months, 24% at 48 months.
    - Increase in erectile dysfunction, Number Needed to Harm (NNH)=84.
      - No difference in other sexual adverse effects.
    - Limitations: Publication bias, selective reporting (under-reporting sexual adverse effects),<sup>3</sup> high loss to follow-up (up to 30%), clinically important differences undefined.
    - Recent, low quality systematic review found similar.<sup>2</sup>
  - Minoxidil: Systematic review<sup>4</sup> (11 RCTs, 1,666 men), minoxidil 2% solution BID versus placebo over 6-12 months found:
    - At least slight improvement in hair count, 62% versus 40%, NNT=5.
    - 16% increase in hair counts.
    - Higher (versus lower) concentrations inconsistently show slight (2-4%) increase hair count.<sup>5,6</sup>
    - Adverse effects: Application-site reactions most common (2-6%), more with higher concentrations.<sup>5-7</sup>

- Only trial comparing finasteride to minoxidil: Poor quality and unreliable.<sup>8</sup>
- Women: Systematic review.<sup>9</sup>
  - Finasteride 1 mg (three RCTs, 287 women): No difference in any outcome.
  - Minoxidil 1-5% versus placebo:
    - Patient-rated moderate improvement or better (26% versus 14%, NNT=8)
    - Increase in hair count, +13 hairs/cm<sup>2</sup>, at 6-12 months.

**Context:**

- Prevalence of androgenic alopecia increases with age, with approximately ½ of men and ⅓ of women balding after age 70.<sup>10</sup>
- Numerous other interventions (like nutritional supplements or Handi-Dome Comb) have low quality evidence with inconsistent results.<sup>9,11</sup>
- Only minoxidil for women or men, and finasteride for men, are supported in guidelines.<sup>12,13</sup>

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**Disclosure:**

Authors do not have any conflicts to disclose.

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