



Flaked out? Topical treatment for seborrheic dermatitis

CLINICAL QUESTION

How effective are topical treatments for adult facial or scalp seborrheic dermatitis?

BOTTOM LINE

About 40-50% of adults will have complete clearance of seborrheic dermatitis at 4 weeks with ketoconazole 2% or ciclopirox 1% compared to ~25% with placebo. Less studied interventions (metronidazole, corticosteroids, pimecrolimus) may be as effective but some have more adverse events (pimecrolimus, corticosteroids).

EVIDENCE

- 4 Systematic reviews¹⁻⁴ of randomized controlled trials (RCTs). Results at 4 weeks and statistically different unless indicated.
 - Ketoconazole 2% (example: twice daily face, twice weekly scalp) 8 RCTs, 2520 patients:
 - Complete resolution:¹ 50% versus 28% placebo, number needed to treat (NNT)=5.
 - No statistical differences versus ciclopirox, topical corticosteroids, metronidazole.¹
 - Other systematic reviews found similar.^{2,3}
 - Ciclopirox 1% cream or shampoo (1% or 1.5%) (8 RCTs, 1525 patients):

- Complete resolution:¹ 38% versus 21% placebo, NNT=6.
 - Others similar.^{2,3}
 - Metronidazole 0.75% (2 RCTs, 131 patients):³
 - Improvement >75%: 39% versus 21% placebo, NNT=6.
 - Corticosteroids:²
 - Total clearance:
 - Mild steroid (example hydrocortisone 1%) versus strong steroid (examples betamethasone 0.05%, mometasone 0.1%, clobetasol 0.05%): No difference (2 RCTs, 93 patients).
 - Strong steroids: 50% versus 8% placebo (2 RCTs, 266 patients).
 - Pimecrolimus 1% (5 RCTs 48-96 patients, reported separately):⁴
 - Reduction in clinical severity score (scale 0-6, lower better):
 - 4.8 versus 3.6 (methylprednisolone 0.1%).⁵
 - 4.8 versus 1.9 (metronidazole 0.75%).⁵
 - No difference^{6,7} versus vehicle or ketoconazole 2%.
 - Complete resolution (2 RCTs, 60 patients):
 - 84% versus 91% steroid (hydrocortisone 1%, betamethasone 0.1%): Not statistically different.²
 - Adverse events: Ketoconazole 2%.¹
 - Versus placebo: No difference.
 - Dryness, pustules, pain: 5% versus 10% (corticosteroids).
 - Erythema, burning, prickling: 20% versus 67% (pimecrolimus 1%).⁷
- Limitations: Small studies, inconsistent doses, randomization concealment and blinding often unclear.

CONTEXT

- Shampoos are rinsed 5-15 minutes after application, lotions applied on scalp as on skin.
- Combining topicals (antifungal, anti-inflammatory) is commonly used despite minimal evidence.
- Recurrences reduced⁸⁻¹⁰ with weekly selenium shampoo or ketoconazole 2%; or twice weekly ciclopirox 1% or tacrolimus 0.1%.
- Cost (30 grams):^{11,12} Ketoconazole 2% ~\$15; pimecrolimus 0.1% \$95; hydrocortisone 1%, betamethasone 0.05% ~\$18.
- Other non-prescription shampoos have minimal evidence.¹³

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AUTHORS

Jennifer Young, MD CCFP-EM
Émélie Braschi, MD PhD,
G Michael Allan, MD, CCFP

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