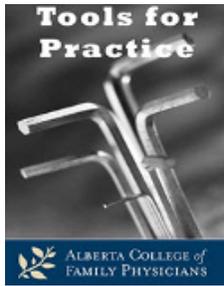


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## Putting the FUN in fungi (Part 2): Topical management of tinea pedis

**Clinical Question: How effective are topical treatments for tinea pedis (athlete's foot)?**

**Bottom Line: Tinea pedis is successfully treated with topical antifungals in 70-75% of patients compared to 20-30% using placebo. Tea tree oil is likely ineffective. Topical terbinafine may result in an absolute improvement of 2-8% more patients cured over other topicals. The majority of patients were treated for 1 week with terbinafine and 4-6 weeks with azoles (like clotrimazole).**

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

- Compared to placebo:
  - Systematic review of 67 randomized controlled trials (RCTs) of mycologically diagnosed onychomycosis and tinea pedis (reported here). Rates of lab-confirmed treatment failure at 6 weeks: <sup>1</sup>
    - Allylamines (examples terbinafine, naftifine), 9 RCTs, 876 patients, 1-4 (most 4) weeks treatment: 25% versus 80% placebo; Number Needed to Treat (NNT)=2.
    - Azoles (examples clotrimazole, miconazole), 6 RCTs, 448 patients, 4-6 weeks treatment: 28% versus 70% placebo; NNT=3.
    - Tea tree oil, 1 RCT, 71 patients, 4 weeks treatment: No difference from placebo.
  - Systematic review of topical terbinafine versus placebo, 9 RCTs, 986 patients, 1-4 (1 most common) weeks treatment:<sup>2</sup>
    - Clinical cure: 72% terbinafine versus 28% placebo, NNT=3.
  - Other systematic reviews found similar.<sup>3-5</sup>
- Direct comparisons:
  - Allylamines versus azoles:
    - Systematic review, 8 RCTs, 1034 patients, 1-6 weeks (most 1-2) weeks treatment:<sup>3</sup>
      - Mycological cure: 78% allylamines versus 76% azoles, NNT=40.
  - Topical terbinafine (an allylamine) versus other antifungals (mostly azoles):
    - Systematic Review, 10 RCTs, 1341 patients, 1-4 (most 1) weeks treatment:<sup>2</sup>

- Clinical Cure: 83% terbinafine versus 75% other antifungals (statistical significance reported inconsistently, if difference real, NNT=13)
- Adverse events: Burning, stinging and itching sensations most common (but not quantified).<sup>1</sup>
- Limitations: Some RCTs<sup>1</sup> and one systematic review<sup>2</sup> were industry funded, clinical cure less commonly reported than mycological cure.

### **Context:**

- Topical antifungals suggested as first-line agents reserving oral agents for severe disease (example moccasin-type infection), failed topical treatment, and immunocompromised patients.<sup>6</sup>
- Unsure whether foot hygiene or changing footwear helps with cure rates.<sup>4</sup>
- Costs (for 30 grams):<sup>7-9</sup>
  - Clotrimazole 1% cream twice daily: ~\$13
  - Miconazole 2% cream twice daily: ~\$15
  - Terbinafine 1% cream twice daily: ~\$30

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### **Disclosures:**

Authors do not have any conflicts of interest to declare.

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