What is the best oral treatment for those nasty looking toes?

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COCHRANE REVIEW: Kreijkamp-Kaspers S, Hawke K, Guo L, Kerin G, Bell-Syer SEM, Magin P, Bell-Syer SV, van Driel ML. Oral antifungal medication for toenail onychomycosis. Cochrane Database of Systematic Reviews 2017, Issue 7.

THE PROBLEM: Onychomycosis is a fungal infection of the nail. It is a common condition that accounts for 50% of all nail diseases. It has a worldwide prevalence of 2–8%.[1] Onychomycosis is more likely to affect older adults, people with diabetes, people with psoriasis and people who are immunosuppressed.[1] Griseofulvin was the first oral antifungal agent used to treat this condition[2] with the azole group of medications coming next, followed by terbinafine.[2]

CLINICAL BOTTOM LINE: This Cochrane review showed that terbinafine was the most effective treatment for achieving a normal looking nail. Azole was also an effective treatment as was griseofulvin. Griseofulvin however, was more likely to cause greater incidence of adverse effects and was not as effective as terbinafine or azole.[3]

Outcome measured	Success	Evidence	Harms
Clinical cure Terbinafine vs placebo	Overall high quality evidence showed that terbinafine was more likely to effect a cure than placebo (RR 6.00, CI 3.98 to 9.08)	This was based on 8 trials including 1006 participants.	All trials reported on adverse events. The most common adverse events for these medications were headache, viral infection, dyspepsia, taste disorders, flu like symptoms nausea, fatigue, abnormal liver functions, diarrhoea, constipation and rash. When comparing medications versus other medications or versus placebo the adverse event rate was similar except for griseofulvin which showed a higher rate of adverse event than experienced by participants taking azole or terbinafine.
Clinical cure Azole vs placebo	Overall high quality evidence showed that azole was more likely to effect a cure than placebo (RR 22.18, CI 12.63 to 38.95)	This was based on 9 trials including 3440 participants.	
Clinical cure Azole vs terbinafine	Overall moderate quality evidence showed that terbinafine was more likely to effect a cure than azole (RR 0.82, CI 0.72 to 0.95)	This was based on 15 trials including 2168 participants.	
Clinical cure Terbinafine vs terbinafine + azole	Overall low quality evidence showed that terbinafine was more likely to effect a cure than terbinafine + azole (RR 1.41, CI 1.01 to 1.97)	This was based on 1 trials including 176 participants.	
Clinical cure Griseofulvin vs terbinafine	Overall low quality evidence showed that terbinafine was more likely to effect a cure than griseofulvin (RR 0.32, CI 1.01 to 1.97)	This was based on 4 trials including 270 participants.	
Clinical cure Griseofulvin vs azole	Overall moderate quality evidence showed that azole was more likely to effect a cure than placebo (RR 0.94, CI 0.45 to 1.96)	This was based on 5 trials including 222 participants.	

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