Author's reply

Sir,

We thank the authors for showing interest in our paper and accepting our arguments justifying the use of isotretinoin in dermatophytosis. While there are concerns on the rationality of this combination, we want to highlight yet again that the use of this combination should only be reserved for recalcitrant cases.[1]

It is likely that the increased cell turnover brought about by isotretinoin may result in faster clearance of itraconazole from the skin, thereby also reducing the reservoir effect. However, the argument put forward by the authors is based on concentration of any drug in isolation is of limited value and should ideally be analyzed along with concomitant pharmacodynamic data.[2] For example, amphotericin B deoxycholate and itraconazole have low concentrations in the cerebrospinal fluid yet they are effective agents for the treatment of cryptococcal meningitis.[2] Tissue homogenates are frequently used to estimate tissue concentrations but they are a relatively crude and potentially misleading matrix when used for this purpose.[2] Mouton *et al*. have highlighted the potential pitfalls in using drug concentrations within whole-tissue homogenates for drawing conclusions related to the activity and efficacy of a drug, especially for extracellular pathogens.[3] Moreover, studies trying to correlate *in vitro* dermatophyte minimal inhibitory concentrations with clinical outcomes have often failed to produce definitive results.[4] Despite our counterargument, we agree that further in-depth studies are required to evaluate the effect of isotretinoin on pharmacokinetics and pharmacodynamics of itraconazole.

Since isotretinoin decreases sebum production and sebum being a major route of delivery of itraconazole to the stratum corneum, it can possibly reduce the bioavailability of the drug to infected sites. Our first argument holds valid for this query as well. We do not know much about the impact of isotretinoin on the pharmacokinetics of itraconazole although it is plausible theoretically.

The final query was regarding inadequate duration of therapy resulting in poor response and possible relapse. We agree that continuing the same oral antifungal for longer period might have given better result. However, according to literature[5-8] and dermatology textbooks,[9,10] the recommended dose and duration of treatment for tinea cruris/corporis with oral itraconazole is 100 mg/day for 2 weeks or 200 mg/day for 1 week. In fact, this duration is also advocated in the package insert of itraconazole (Sporanox®).[11] We used the same regimen for our patient; nevertheless considering the present scenario of relapsing dermatophytosis in our country, longer treatment schedule may be required.

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Conflicts of interest

There are no conflicts of interest.

Kenit P. Ardeshna, Shaurya Rohatgi, Hemangi R. Jerajani

Department of Dermatology, Venereology and Leprosy, MGM Medical College and Hospital, Navi Mumbai, Maharashtra, India

Address for correspondence: Dr. Shaurya Rohatgi, 502/A, Sai Prasad Residency, Kharghar Sector 10, Navi Mumbai - 410 210, Maharashtra, India.
E-mail: shaurya023@gmail.com

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