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Letter to Editor

Oral Terbinafine Plus Systemic Glucantime Vs. Systemic Glucantime Alone in The Treatment of Cutaneous Leishmaniasis

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Letter to Editor

Cutaneous Leishmaniasis(CL) as an endemic disease is a major health problem in Isfahan, a large province in Iran. To date, pentavalentantimonials are the first line treatment in all types of leishmaniasis [1]. However, their cost, side effects and the problem with injection route, necessitate further study.

Oral alternative treatments include: azithromycin, cotrimoxazole, metronidazole,allopurinol and miltefosine [2]. Recently antifungal compounds such as Ketoconazole, Itraconazole, Fluconazole and Terbinafine have been considered as potential anti-leishmania drugs targeting ergosterol in the leishmania cell wall [3].

So, a randomized clinical trial was performed in Isfahan University of Medical Sciences. 160 patients were randomly allocated into two treatment groups. The first treatment group received Glucantime (20 mg/kg/day intramuscular injection for 20 days) while in the other treatment group,oral terbinafine (250 mg /day, for 4 weeks) was added in addition to systemic Glucantime injection as previously mentioned. Children less than 12-year-old, pregnant women and patients with any history of drug sensitivity were excluded. CBC, hepatic and renal tests were checked for all patients before starting the drugs. Size and induration of the lesions were measured before the treatment and 1, 3, and 4 months after the treatment. The rate of clinical improvement was also estimated at the third month. Cure rate also was estimated at 3 months based on the lesion size.Significant more reduction was observed in both lesion size and induration in terbinafine treated group compared to systemic glucantime single therapy. Total lesion improvement was more in combination therapy group as well. Previous studies conducted on therapeutic effect of terbinafine in CL shows its effectiveness.

Adding cryotherapy into intralesionalMeglumine (Glucantime) would be much better than each treatment alone [4].

Khalid et al have reported 71.5% clinical response in 10 patients of their open clinical trial treated with oral terbinafine [5].

In the clinical trial conducted by Farajzadeh et al. oral terbinafine for 4 weeks along with cryotherapy had similar efficacy to systemic glucantime on tropica L. Lesion improvement was slower in Terbinafine-cryo treated group but there was no significant difference in mean lesion size between two groups at the end of the study [6].

IntralesionalGlucantime would be painful and leads only to about 42% improvement of CL lesions [7].

Zimmo Zakai et al studied therapeutic effect of itraconazole and terbinafineLeishmania major in BALB/c mice and reported and reported therapeutic effect for both but faster and more efficacy by terbinafine [8].

Oral terbinafine could be considered as an adjunct therapy to glucantime for treatment of acute cutaneous leishmaniasis. Adding

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terbinafine to systemic glucantime showed significant better improvement in CL patients.Terbinafine could be considered as an effective drug for acute cutaneous leishmaniasis. Further studies are warranted to assess single terbinafine therapy.

Consent

The examination of the patients was conducted according to the Declaration of Helsinki principles.

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