Abstract

Randomized double blind study on efficacy of intralesional metronidazole vs intralesional sodium stibogluconate in cutaneous leishmaniasis

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Abstract

Background
Sodium stibogluconate is considered as the gold standard treatment for cutaneous leishmaniasis. Poor response to Sodium stibogluconate has been identified in Sri Lanka highlighting the need for alternative treatments.

Methods
A Randomized, double blind clinical trial was conducted at Dermatology unit, Teaching Hospital Anuradhapura to assess the efficacy of intra-lesional metronidazole in Leishmania donovani cutaneous leishmaniasis (CL). Patients were randomly allocated to a test group which received intra-lesional Metranidazole and to the control group which received Sodium stibogluconate (SSG) weekly for 8 sessions. Patients were reviewed at intervals for 6 months to document the treatment response and for further 6 months to identify relapses. The cure rate at 12 and 24 weeks were assessed using a stratified analysis with chi-squared test.

Results
Out of 100 study participants, 53 who received SSG and 47 who received metranidazole completed the observational period. 39.6% of SSG group and 14.8% of metranidazole group had achieved complete response at 12 weeks. The complete cure rate further increased to 66.03% and 29.78% at 24 weeks respectively (p> 0.05). There were two relapses at further 6 months observational period in SSG group but the relapse rate was zero for metranidazole group.

Conclusions
The standard treatment SSG shows superior efficacy to metranidazole in treating CL caused by leishmania donovani in Sri Lanka. However Intra-lesional metranidazole showed 29.78 % response rate with no relapses indicating it can be used as an alternative treatment.

Key words: Cutaneous Leishmaniasis; Sodium Stibogluconate; Metronidazole

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