

Improving patient outcomes with uncomplicated localized cutaneous leishmaniasis requires more systematic data collection and analysis

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Fig 1: Uncomplicated localized cutaneous leishmaniasis

Key Messages

- Sodium stibogluconate (SSG) is the most widely available treatment for uncomplicated localized cutaneous leishmaniasis (uLCL), but there is no local data on how well it works in Ethiopia.
- Our study in Boru Meda General Hospital revealed that intralesional SSG had a suboptimal (60%) cure rate and caused pain in a majority (96%) of patients.
- To determine the most effective uLCL treatment in Ethiopia, further research is required to identify the best treatment for uLCL in Ethiopia.

What is the problem and why is it important?

- Intralesional administration of SSG is a common therapeutic method for treating uLCL and is a routine practice in most dermatological centers.
- The evidence in favor of this medication's use, however, is based on research data from other agents rather than *Leishmania aethiopica* which is the most common cause of CL in Ethiopia (>90%).
- Thus, conducting research on the effectiveness of intralesional SSG could help to improve the management of uLCL caused by *Leishmania. aethiopica* and provide clinicians with evidence-based care for the disease.

How did we measure it?

The data was collected from 81 localized cutaneous leishmaniasis cases (and analyzed on 72) from the outpatient departments in Boru Meda General Hospital between January and August 2021. The inclusion criteria of LCL followed the guidelines for diagnosis, treatment, and prevention of leishmaniasis in Ethiopia. Then all cases that met the criteria were given IL SSG weekly for a maximum of six

doses and three months of follow-up. Finally, the treatment outcomes measured were whether patients were cured or not, and the presence of adverse events.

Treatment Outcome	N (%)
Worsening	5 (6.9)
No response	2 (2.8)
Partial response	12 (16.9)
Good response	10 (13.9)
Cure	43 (59.7)

Table 1: Treatment outcome of LCL after 3/12 of IL SSG

What did we find?

- Treatment effectiveness of IL SSG was around 60% and lower than other countries' experience.
- Around 96% of all cases had injection site pain. Around 18% of the cases had moderate to severe pain with systemic manifestation.
- Effectiveness was higher among:
 - Men
 - Those with lower levels of parasites in the skin
 - Increased age

Implications and recommendations

- Given the suboptimal uLCL treatment outcomes with IL SSG, as well as the fact that nearly every patient complained of injection site pain, other treatments should be investigated.
- As treatment practices differ considerably across the country, more systematic data collection (including routine data and research) is required to determine the best-localized treatment for LCL.
 - The data should include adverse events, treatment effectiveness, cost-effectiveness, and feasibility.