

## Lupoid Cutaneous Leishmaniasis: Review

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### ABSTRACT

**Introduction:** Leishmaniasis is an infectious disease currently threatens 350 million people in 88 countries. Lupoid leishmaniasis occurs as a result of the host response, in which despite an intensified hypersensitivity the cell mediated immunity cannot sterilize lesions. A chronic granulomatous inflammation remains active for a long time. To summarize the articles published about Lupoid leishmaniasis.

**Materials and Methods:** a systematic web base search was conducted in PubMed up to July 2015.

We included articles with available abstract in English language. Manual searching was done within the reference list of articles.

**Results:** Two reviewers independently reviewed and assessed eligibility criteria, assessed quality, and extracted data.

**Conclusion:** Some patients have periods of relapse and remission at the site of inoculation of parasites and others suffer from chronic injury for years. In the case of effective disease treatment several studies have been conducted, so far, no satisfactory results have been achieved.

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### Introduction

Leishmaniasis is an infectious disease currently threatens 350 million people in 88 countries.

Afghanistan, Brazil, Iran, Peru, Saudi Arabia, and Syria are endemic for this disease.

Because of its manifestations and complications, leishmaniasis has psychological and social consequences. Lupoid leishmaniasis (LL) is one clinical form of that and was firstly described in 1923 (1). LL incidence is estimated between 0.5 and 6.2% (2). It is a chronic condition that typically follows acute cutaneous leishmaniasis infection. One to two year after healing of the acute lesion, new papules and nodules will appear at the margin of the remaining scar (3-6). The papules have a glaucomatous appearance and are often scaly. Most reported cases were associated with old world strains of leishmaniasis rather than new world strains, and *Leishmania tropica* was the responsible agent in their majority (7, 8). Lupoid CL is common in the endemic countries, particularly in the Middle East and Afghanistan.

In this study, we reviewed and summarize the articles published about Lupoid leishmaniasis.

### Materials and Methods

Articles were selected by searching the Pub Med up to July 2015. Our key word and Medical Subject Headings (MESH) was "Lupoid leishmaniasis ". Retrieved articles were assessed to identify additional related articles from their reference list.

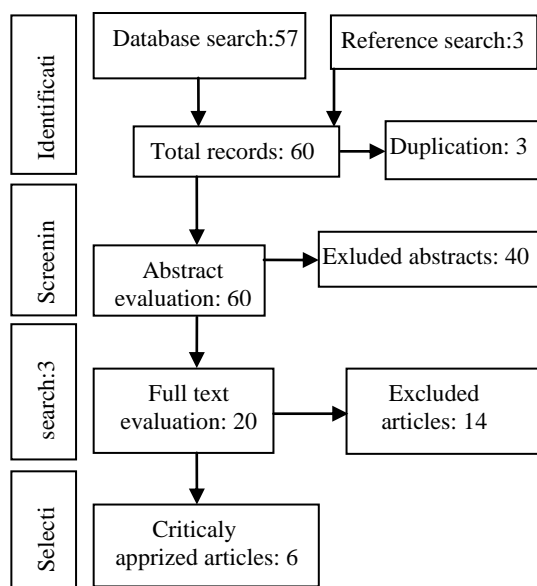
We included articles with available abstract, full text in English language. Manual searching was conducted within the reference list of articles.

#### Critical appraisal

Firstly, abstracts were reviewed by two independent researchers. So, 20 abstracts were screened for relevancy two times. 14 were excluded due to no relevancy.

The remaining 6 abstracts were fully assessed by our two reviewers.

We used consort quality appraisal from to assess the quality of selected studies. Figure-1 shows the consort flow diagram of study design.



**Figure 1: The consort flow diagram.**

Two reviewers independently scored the quality criteria for each included study and a third reviewer resolved any discrepancies. We used a structural data extraction tool. But due to heterogeneity in main outcome measurements, a Meta-analysis was not performed.

## Results

The oldest study was published in 1996 and the most recent one in 2015.

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Table-1 shows the general characteristics of the included studies.

**Table 1: The general characteristics of the included studies**

| First author     | year | Country  | Sample size | Topic                      |
|------------------|------|----------|-------------|----------------------------|
| Banihashemi (8)  | 2015 | Iran     | 60          | Treatment                  |
| Mashayekhi (9)   | 2014 | Iran     | 12          | Physiopathology HTLV-I and |
| Pezeshkpoor (10) | 2013 | Iran     | 51          | Lupoid Leishmaniasis       |
| Ul Bari (11)     | 2010 | Pakistan | 254         | Manifestations             |
| Asilian (12)     | 2006 | Iran     | 24          | Treatment                  |
| Momeni (13)      | 1996 | Iran     | 65          | Diagnosis                  |

5 studies were conducted in Iran and one was from Pakistan.

## Discussion

In the absence of randomized controlled trials, there is not enough data about the correct and selective therapeutic and diagnostic protocol for lupoid leishmaniasis.

## Conclusion

In conclusion, Lupoid leishmaniasis is an easily diagnosis in endemic countries, due to a clinical similarity outside endemic areas it can be misdiagnosed. Facial plaque and tuberculoid are the key components of Lupoid leishmaniasis diagnosis.

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