

## **Case Report**

# **A rare case report of extensive cutaneous Leishmaniasis lesions on ear from Dehloran city, West of Iran and the treatment process**

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## **ABSTRACT**

**Background and objectives:** Leishmaniasis is a parasitic zoonotic disease and the sixth most important tropical parasitic disease, according to the WHO reports. This disease causes a lesion with remaining scar.

**Case presentation:** This case report presents a patient with cutaneous Leishmaniasis. A 35-year-old male patient weighing 83 kg, residing in Dehloran (Ilam, West of Iran) referred to the leishmaniasis center of Dehloran in June 2015 with a 1 × 10 cm wide wound on the right ear. Specimens were prepared from the lesion, stained with Giemsa, and studied under microscope, which revealed Leishmaniasis parasite.

**Keywords:** Leishmaniasis, ear, extensive lesion, rare reports, Iran

## **INTRODUCTION**

Leishmaniasis is a parasitic zoonotic disease and the sixth most important tropical parasitic disease, according to the WHO reports (1, 2). Iran, Afghanistan, Sudan, Algeria, Syria, Saudi Arabia, and Brazil are the main foci of the disease (3). The disease agent is a Protozoan parasite, called Leishmania that causes lesions with remaining scars (4). Leishmaniasis occurs in both rural and urban areas. The urban form of leishmaniasis

parasite includes Leishmania tropica and the rural leishmaniasis agent includes Leishmania major (5). Carriers of the disease in the urban type are domestic sand flies, called Phlebotomus Sergenti that transfer the parasites to humans. The rural type is transferred by a half-wild sand fly, called Phlebotomus papatasi that transfers the parasite from rodents to humans (6-8). Visceral, cutaneous, and cutaneous-mucosal leishmaniasis

are different types of the disease (9, 10). Iran is one of the most important endemic areas for cutaneous Leishmaniasis in the world (11). There are still areas largely infected with endemic Leishmaniasis in Iran. Leishmaniasis is reported

was introduced to leishmania center of Dehloran to begin the treatment protocol.

The physician prescribed systemic glucantime due to the extensive damage, 2 vials of muscular injections daily for 14 days.



in different areas of the country, such as Ilam, Fars, Isfahan, Khuzestan, Kerman, Golestan, Khorasan, Semnan, Qom, Iran, Sistan, and Hormozgan (12).

### Case presentation

A 35-year-old male patient, weighing 83 kg, residing in Dehloran (Ilam, West of Iran) referred to the leishmaniasis center of Dehloran in June 2015 with a 1 × 10 cm wide wound on the right ear (Figure 1). He had a history of travelling to Jalizi village, Musian city, Dehloran province, which is a known focus of Leishmaniasis, where the patient was exposed to the fly bites.

The patient had a history of chronic disease (diabetes). A specimen was prepared from the lesion and stained with Giemsa. In the initial study, no parasite was observed, but the clinical presentation of the lesion resembled leishmaniasis lesion. Further examination, re-sampling, staining, and investigation under the microscope in the laboratory revealed the leishmaniasis parasite and confirmed our diagnosis. Eventually, the patient

**Figure 1.** Cutaneous lesion in the presented patient

### DISCUSSION

This case report presented a 35 year-old man with a large lesion (1 to 10 cm wide) on the right ear in June 2015. The lesion was extensive and overall and indicated a bite. The patient had a history of chronic diseases such as diabetes, which is perhaps one of the reasons for his massive wound. In another study conducted in the city of Bam in the East of Iran, 82.3% of patients had Leishmaniasis lesions (13). In one study conducted in Isfahan, central Iran, Leishmaniasis lesion was found in 46% of patients (14). In a study in Kalaleh, Golestan province in northern Iran, 44% of patients had Leishmaniasis lesion (15). In a study in Damghan, Semnan province, Iran Leishmaniasis lesion was found in 47.4% of patients (16). Although there is a possibility of infection anywhere in the body, ear infection is a rare site of infection. The results of studies show that cutaneous lesions are very common wounds, but the location can be different and important.

Occurrence of cutaneous Leishmaniasis on ear is a rare and important report.

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