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Case Report

A case report of a patient with 15 acute local wet wounds in the legs and its treatment process

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ABSTRACT

Background: Cutaneous leishmaniasis is a prevalent disease in tropical and subtropical regions of the world. It is transmitted by the parasite Leishmania through sand fly bites psychodidae families, flutamida subfamilies from human to human and animals. Cutaneous wounds usually occur with a small number of lesions but sometimes the number of lesions is very high requiring immediate and systemic treatment.

Case Report: A 37-year-old woman nomadic tribes of Kermanshah in January 2015 with the development of 15 ulcers referred to the urban health centers in Dehloran city, Iran. Other family members were not sick and had no skin lesions. The patient had not any underlying disease. After referring the patient to a health center in the city of Dehloran, the wounds were examined. Smears were prepared from the wounds of patient and histological studies were conducted using Giemsa. By microscopic examination of the samples in the laboratory, promastigote leishmania was observed on the Lam smear.

Conclusion: In the leishmaniasis disease, incidence of cutaneous wound is a symptom and the number of lesions depends on the frequency of bites, but a large number of serious injuries require serious and systemic treatment.

Keywords: Wound wet, Dehloran, Female, Iran

INTRODUCTION

Cutaneous leishmaniasis is a parasitic disease common in tropical and subtropical regions of the world. It is transmitted to human and animals by Leishmania, sand fly, psychodidae families, flutamida subfamilies (1). Leishmaniasis is a zoonotic parasitic disease in 66 African and Asian countries and native to 22 countries in America and Europe (2,3). Cutaneous leishmaniasis occurs in both rural and urban forms. In urban form Leishmania tropica is the pathogen while in and rural form Leishmania major is the causative agent. The reservoir of disease in urban form is primarily humans but the dog is accidentally infected and if the reservoir of disease in rural is largely rodents, the most important of them is

Rhombomys opimus rats (4,5). Statistics show that the incidence of cutaneous leishmaniasis in Iran is thirty people per hundred thousand people. This disease has particular important due to the high prevalence of the disease and its distribution in different parts of Iran, especially where the disease is endemic (6, 7). More cases are in Algeria, Syria, Saudi Arabia, Peru and Brazil, Iran and Afghanistan. The outbreak in the world is approximately twelve million people, of which its prevalence is one and a half million people per year (8-11). Provinces such as Khorasan, Yazd, Bushehr, Fars, Khuzestan, and Ilam have the highest incidence of the disease in Iran (12). Cutaneous Leishmaniasis type is a major health problem in Iran which every year in addition to skin lesions in patients results in a waste of human energy, medical and health, together with the loss of a large financial costs (13,14). However the disease impose economic burden on families, communities and countries, particularly developing countries (15). Leishmaniasis skin ulcers may take several months to recover or even with a successful treatment scars may remain fixed in place (16).

Case study

A 37-year-old female patient was nomadic tribes of Kermanshah. The patient had travel history between rural areas in the provinces of Kermanshah and Ilam. In January 2015, 15 the patient with the incidence of wound referred to the urban health center in dehloran city (fig 1). Other family members were not sick and had no skin lesions. The person had not any underlying disease. After referring the patient to a health center in the Dehloran city, the wounds were examined. Individuals' lesions were local and 15 topical wounds could be observed on two feet (Figure 1 and 2). Smears were prepared from individual lesions and histological study was conducted using Giemsa stains. By microscopic examination of samples in the laboratory, leishmanial promastigote was viewed on the slides. To start treatment the patient was referred to the treatment of cutaneous leishmaniasis in Dehloran city. The doctor prescribed glucantime injection ib be injected to the multiple lesions and the top five in the legs. Glucantime was administered for seven days, after the end of the treatment process the lesions were improved.

Figure 1. Cutaneous lesion in the patient's leg

Figure 2. Cutaneous lesion in the patient's leg at the same person

DISCUSSION

In cutaneous leishmaniasis disease, the incidence of one or two lesions is common and the number of lesions depends on the number of bites (17). In the present study, a patient with 15 cutaneous lesions was observed. The results of studies conducted in different parts of Iran show that the dominant of cases has one or two lesion. For example, in Damghan 47.4% of patients had active lesion (18). The results of epidemicological studies in relation to the number of lesions of cutaneous leishmaniasis showed that 46% of patients had only one lesion (19). The results of epidemiological studies in Kolaleh and Bam demonstrated that respectively 44% and 82.3% of people in these areas had active lesions (20,21). The leishmaniasis disease the prevalence of a large number of lesions is

unusual and rare and serious and systemic treatment is required. The most risk factors of leshmaniosis include lack of sanitation, poverty, urbanization and malnutrition, deforestation. Prevention is more important than treatment. It can partly be prevented by using nets while sleeping. Treating the nets with insecticide is very effective. Using fine mesh sizes les than 0.6mm provides good protection against sandflies, however, a mosquito net with more than 1.2mm mesh may provide a limited protection against the sandfly bites (22). Although the finer mesh sizes would increase the protection, but have higher cost and reduced air circulation. It may cause overheating. It should be noted that most of Phlebotomine sandfly attacks usually occur at sunset in the ruaral areas rather than at night. Therefore, it is useful to put the nets over windows and doors. Using insect repellents, spraying animal shelters and houses with insecticides are also useful for protection. (22)

The recover patients from cutaneous leishmaniasis are usually protected against the future infections. Hence, sometimes infecting with a bite might be useful. Traditional societies sometimes got intentionally and voluntarily sandflies bite to prevent multiple wounds on their faces. In the middle east areas, people used to transferred fluid from one lesion on infected patients to non-infected subjects using thorns (23). Nowadays, a vaccine made with antigens from L. infantum, is used in Europe.

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