LETTER TO THE EDITOR

Prevalence of leishmaniasis in urban and semi urban areas of Peshawar, Pakistan

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Madam, leishmaniasis is an important medical health problem caused by an obligate intra-macrophage protozoan that spreads through the bite of female sand-fly to humans. It is recognized by both variety as well as complexity and is caused by more than 20 species which is spread to individuals by 30 different species of phlebotomies (Diptera, Psychodidae) and flies. In case of cutaneous leishmaniasis (CL) one or several ulcer(s) or nodule(s) on the patient's skin are observed.[1] In majority of the cases of CL, L. tropica, L. mexicana and L. amazonensisare involved. The two main phases of the life cycle of leishmania are; the promastigotes and amastigote. Leishmaniasis is endemic in developing as well as in developed countries and is found in all other continents except Australia and Antarctica. In Pakistan, Anthroponotic cutaneous leishmaniasis (ACL) is highly prevalent and cases were found in all provinces of Pakistan.[2] The prevalence rate of leishmaniasis is alarming in Pakistan and the incidence of the disease is spreading constantly rising.[3] The first major outbreak of CL in Pakistan was reported in 1997 at Afghan refugee's camp in district Dir, KPK.[4] However, the highest prevalence rate of CL is in northern (851 cases), Followed by southern (789 cases) and western (702 cases) Pakistan[5]. This was reported after almost ten years of the major outbreak.[4] The high prevalence of infection occurs not only because of environmental factors (like urbanization, poor sanitary condition and sleeping without bed nets) but individual risk factors such as HIV, malnutrition, genetic factors and low socio economic status can also contribute to its rising incidence.[3]

Figure: Effects of cutaneous leishmaniasis (L. tropica) on (a) chin (b) hand (c) lips and (d) on nose.

A research done by our group between April-September 2014 observed high prevalence rate (87%) of leishmaniasis in urban and semi urban areas of Peshawar. The studied population (n=116) constituted Afghan refugees as well as local residents of Peshawar. Patients whose lesions are clinically suspected were. We found that the prevalence of the leishmaniasis in the studied population was apprehensively higher than the previous reports. The affects of CL in different age groups is depicted in (Figure). So, strategies should be made to improve the management and control of the disease. It is also mandatory to understand the risk factors associated with leishmaniasis and to create awareness in the general population about using bed nets, flies and mosquitoes repellents and cleanliness in particular.

Patient Consent: We took written approval from the patients for publishing their pictures in our article/letter.

Ethical Approval: Ethical approval for the study was obtained from the bioethical committee of Hazara University Mansehra for research on prevalence of leishmaniasis in urban and semi urban areas of Peshawar, Pakistan.

Disclaimer: None.

Conflict of Interest: None.

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