

Abstract

Outbreak Investigation of Cutaneous Leishmaniasis (CL) in North Waziristan Agency, Federally Administered Tribal Area (FATA) - April 2016

Inayatur Rehman; M Saleem

Corresponding Author:

Inayatur Rehman

Abstract

Background: On 4th April 2016, community representative from village Spinwam, North Waziristan reported 39 suspected cases of Cutaneous Leishmaniasis. FELTP Fellow and N-STOP Officer North Waziristan attached to Political Agent Office North Waziristan was tasked to visit the affected area and carry out necessary investigations.

Objective: The objectives were to identify any additional cases, associated risk factors and recommendation for control.

Methods: A case was defined as a resident of Tehsil Spinwam with one or more papular, nodular or ulcerative lesions on the skin after history of sand fly bite from February 2016 to April 2016. Hospital records were reviewed, patients and health staff were interviewed, and suspected sites visited. A case control study was conducted with one control for each case.

Results: Sixty-seven cases were identified (58 clinically and 9 by microscope). Male to female ratio was 1:2. Median age: 10 years (1-60 years). The Epi curves shows intermittent source of infection. Risk factor analysis showed that private gardens (OR=1.95, 95% CI=1.11-3.26; p-value<0.05), stagnant water-body (OR=1.84, 95% CI=1.08-3.13; p-value<0.05) and not using mosquito-protective measures (OR=36.11, 95% CI=16.8-77.5; p-value<0.05) were significantly associated with the illness. Use of bed nets (OR=0.05, 95% CI=0.02-0.12; p-value<0.05) and mosquitoes repellents (OR=0.05, 95% CI=0.02-.012; p-value<0.05) were negatively associated with the illness.

Conclusions: The area is bordering with Afghanistan and index case had a travel history from Afghanistan four months before appearance of his lesion. He left it untreated allowing the parasite to be transmitted to the indigenous sandflies and subsequently resulted in an outbreak. Based on results existing surveillance system for Leishmaniasis was strengthened, indoor residual spray and fumigation for vector control carried out, bed nets and insect repellants provision were ensured. Injection Glucontine was arranged. Regular awareness sessions were recommended. During the 04-month follow up period 32 cases were reported who had sand fly-bite histories of longer than 05 months.

(*iproc* 2018;4(1):e10634) doi: [10.2196/10634](https://doi.org/10.2196/10634)

Edited by Y Khader; this is a non-peer-reviewed article. Submitted 29.03.18; accepted 29.03.18; published 29.03.18.

Please cite as:

Rehman I, Saleem M

Outbreak Investigation of Cutaneous Leishmaniasis (CL) in North Waziristan Agency, Federally Administered Tribal Area (FATA) - April 2016

iproc 2018;4(1):e10634

URL: <http://www.iproc.org/2018/1/e10634/>

doi: [10.2196/10634](https://doi.org/10.2196/10634)

PMID:

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