

## LYMPHATIC LEISHMANIASIS – FIRST CASE REPORT FROM NEPAL

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**Abstract.** We report a case of exclusive involvement of lymph node in leishmaniasis presenting as generalized lymphadenopathy. The diagnosis of lymphatic leishmaniasis was confirmed by the presence of *Leishmania donovani* body in fine needle aspiration cytology, positive direct agglutination test and anti-rK39 antibodies. The bone marrow aspiration was negative for *Leishmania donovani* body. This is the first case of lymphatic leishmaniasis reported from Nepal.

Visceral, cutaneous and mucocutaneous leishmaniasis are the major clinical forms of leishmaniasis caused by different species of the genus *Leishmania*. Visceral leishmaniasis (VL) or Kala-azar is an important health problem in Nepal (Koirala, 1995). Lymph node involvement in Kala-azar has been reported earlier (Singh *et al*, 1998; Sah *et al*, 1999). However, exclusive involvement of lymph nodes in leishmaniasis has not been reported so far from Nepal. We report a case of lymphatic leishmaniasis (LL) with an unusual manifestation of generalized lymphadenopathy of five years duration. The case was diagnosed on the basis of presence of *Leishmania donovani* (LD) body in fine needle aspiration cytology (FNAC) of lymph node, positive direct agglutination test (DAT) and anti-rK39 antibodies.

A 40-year-old female patient presented with multiple swellings in both sides of neck, axilla, and inguinal regions for five years. She also complained of high grade intermittent fever of one year duration. The swellings were painless and reported to have currently increased in size as well in number. There was no history of loss of appetite, pressure effects, bowel, bladder, joints or nervous system involvement. She underwent lymph node aspiration for cytology and lymph node biopsy on

three occasions. It was reported as reactive lymphadenitis. She was treated earlier with various antibiotics, antimalarials and full course of anti-tuberculosis therapy without any clinical improvement.

On examination, she was febrile and pale. Multiple superficial lymph nodes were palpable on cervical, axillary, inguinal and epitrochlear regions. The lymph nodes vary in size from 1-3 cm in diameter and were non tender, firm and freely mobile. Liver was 2 cm palpable below costal margin. There was no splenomegaly. Other clinical findings were within normal limits.

Her hemogram was within normal limits. Peripheral blood smear and quantitative buffy coat (QBC) for malaria parasite were negative. Blood culture was sterile. Sputum was negative for acid-fast bacilli. Serum was negative for HIV antibody. Chest x-ray and ultrasound of abdomen did not reveal any abnormality. FNAC of cervical lymph node showed an occasional extracellular LD bodies on polymorphous background (Fig 1). Serum tested for DAT and anti-rK39 antibodies were strongly positive. Bone marrow aspirations done on two occasions were negative for LD body. On the basis of above findings the case was diagnosed as lymphatic leishmaniasis and was treated with sodium stibogluconate (20 mg/kg body weight, deep intramuscular) for 30 days. She became afebrile on the 6<sup>th</sup> day and was advised to come for follow up every two weeks for six months. There was no residual lymphad-

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Fig 1—Fine-needle aspiration of lymph node showing an occasional LD body (Papanicolaou stain, x 1,000).

enopathy and she remained afebrile till the last follow up.

Indian Kala-azar is usually not accompanied by lymph node enlargement, although manifestation of leishmaniasis in the form of superficial lymph node enlargement without any visceral involvement is known to occur in the Mediterranean countries, Africa and China (Nandy and Chawdhury, 1984). The leishmania lymphadenitis with no other clinical manifestations has been reported from Shiraz Province of Iran (Kumar *et al*, 1987). In India, Nandy and Chawdhury (1984) first described LL from west Bengal. Only two cases of lymph node enlargement in VL have recently been reported from Nepal (Singh *et al*, 1998; Sah *et al*, 1999). The majority of lymphatic leishmaniasis patients do not have fever. Three distinct natural courses of LL have been described. Some of these patients remain as LL, some develop full blown Kala-azar and yet others develop dermal lesions (Nandy and Chawdhury, 1984; 1988).

The significance of LL lies in the fact that the majority of cases remain asymptomatic and therefore do not seek medical advice till late.

Thus, they remain undiagnosed and serve as a potential source of parasite in the community. On the other hand the diagnosis is often overlooked in view of other common causes of generalized lymphadenopathy *eg*, tuberculosis, lymphoma, leprosy and fungal infection.

In our patient who reported from endemic area of Kala-azar, the generalized lymphadenopathy in the absence of other significant clinical and laboratory findings initially misled the clinician. Lack of suspicion of lymphatic leishmaniasis led to long years of sufferings for the patient.

It was concluded that lymphatic leishmaniasis as a differential diagnosis needs to be kept in mind when a patient with generalized lymphadenopathy is encountered from an area endemic for Kala-azar.

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