

LETTER TO EDITOR (VIEWERS CHOICE)

LYME'S DISEASE IN INDIA

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Lyme disease is a tick-borne disease caused by three species of *Borrelia*: *B. burgdorferi*, *B. burgdorferi sensu stricto*, *B. afzelii*, and *B. garinii*; the latter two being more frequently reported from Asia. The global distribution of the disease corresponds to the distribution of ixodes tick that transmits the organism (1). Most previously reported cases are from endemic regions like United States, Europe, Middle East, and south-east Asia which are the natural habitat for the vector. There are only few cases of Lyme disease reported from India mainly from north India (2-4).

A 14 years girl of staying in a rural area presented with abdominal pain and multiple joint pains. All major and minor joints were involved without swelling. She was unable to write and eat by herself. She had fever 2 days prior to this episode. Ten days prior to these complaints she had been to a NSS camp in a forest and had stayed there for a week. On examination, she had bradycardia (heart rate: 50/min), papular rash over trunk with mild itching. Joint movements were restricted in both the wrist and knee joints. Other systems were normal. Investigations revealed hemoglobin of 11gm/dl, white cell count 7200/cmm (lymphocytes 41%, polymorphs 50%), platelets 2,00,000/comm. ESR was 40mm/at the end of first hour. Tests for enteric fever (slide method), dengue, (IgM, IgG, NS1), Weil-Felix and Rapid malarial antigen tests were negative. Electrocardiogram (ECG) revealed sinus bradycardia. Lyme's IgM was positive with a titer of 125.5 AU/ml (Normal <18 AU/ml). She was treated with doxycycline 4mg/kg twice a day for 4 weeks and orciprenaline (1mg/kg/day) for bradycardia for 15 days along with non-steroidal anti-inflammatory drugs. She improved and was discharged on 5th day of admission. At 3 months follow up, she is doing well.

Ixodes ticks are present in Himalayan region of India (2,4,5) and thus, there is a likelihood that Lyme's disease may exist in our country. Our patient was from a rural area and had cattle in her house. She also had been to a forest prior to her illness. There is likelihood that she might have got the infection from forest. The epidemiological team visited the girl's residence and found no evidence of ticks in the cattle. Elisa test for

Lyme's disease is negative in early stage of disease and lacks sensitivity. It is false positive in syphilis, infectious mononucleosis and rheumatoid arthritis. None of the above conditions could explain the girl's symptomatology. Though rare in India, Lyme's disease should be kept as possible differential diagnosis in children presenting with arthritis with rash or carditis.

Funding: None

Conflict of Interest : None

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DOI No. 110.7199/ped.oncall.2016.25