

O225

Oral Session

Emerging infectious diseases

OUTBREAK OF PHLEBOVIRUS INFECTION IN LOMBARDIA, A NORTHERN ITALY REGION IN SUMMER 2013

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Objectives:

An outbreak of Phlebovirus in Lombardia region (Northern Italy) during the period 1 June-30 November 2013 is described.

Patients and methods:

CSF and plasma or serum samples from 22 patients (age 37-98) with a suspected Phlebovirus were investigated. Sera and CSF were tested with an indirect immunofluorescence test (IIFT) Sandfly fever virus Mosaic 1 IgG and IgM EUROIMMUN (Lubeck-Deutschland) that allows the simultaneous detection of antibodies against four viral serotypes Sandfly Sicily virus (SFSV), Sandfly Naples virus (FSNV), Sandfly Toscana virus (TOSV) and Sandfly Cyprus virus (SFCV).

Results:

Phlebovirus IgM were detected in 8 patients, IgM and IgG were detected in 10 patients and IgG only were detected in 4 patients. Among the patients, 4 had a history of travel in endemic areas (3 in Southern Italy and 1 in Romania) in the 2 weeks before the onset of symptoms, while the remaining 18 patients had no history of travel, suggesting the local acquisition of the infection. The regional center for Arbovirus vectors control confirmed an increasing density of the vector (Phlebotomus) in the Lombardia region and the appearance of the vector in areas previously free from sandflies.

Conclusion:

As far as we know, autochthonous Phlebovirus infections were not previously reported north to the Po River. Thus, is shown circulation of Phlebovirus in Northern Italy (beyond Central and Southern Italy). Modification of sandflies ecology niches as a result of climatic changes have a direct impact on the epidemiology of associated human diseases.