

ZIKA VIRUS INFECTION IN A NON MOSQUITO-BORN TRANSMISSION COUNTRY, EPIDEMIOLOGICAL AND CLINICAL CHARACTERISTICS.

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Fig. 1 Place of exposure and reason for travel of Zika imported cases

Introduction

In 2014 Zika virus infection was introduced to the Americas, specifically Easter Island and Brazil.

Since then, more than 700.000 native cases in 47 countries have been confirmed.

Brazil and Colombia have the higher number of cases reporting cases of congenital and Guillain Barre syndromes

Chile has not reported vectorial transmission.



Objective

To describe demographic and clinical characteristics of Zika infection in Chilean travelers, including one case of sexual transmission.

Methods

Zika infected patients diagnosed by Zika virus assays in our laboratory were invited to participate, they signed the informed consent and filled an questionnaire sent by email.

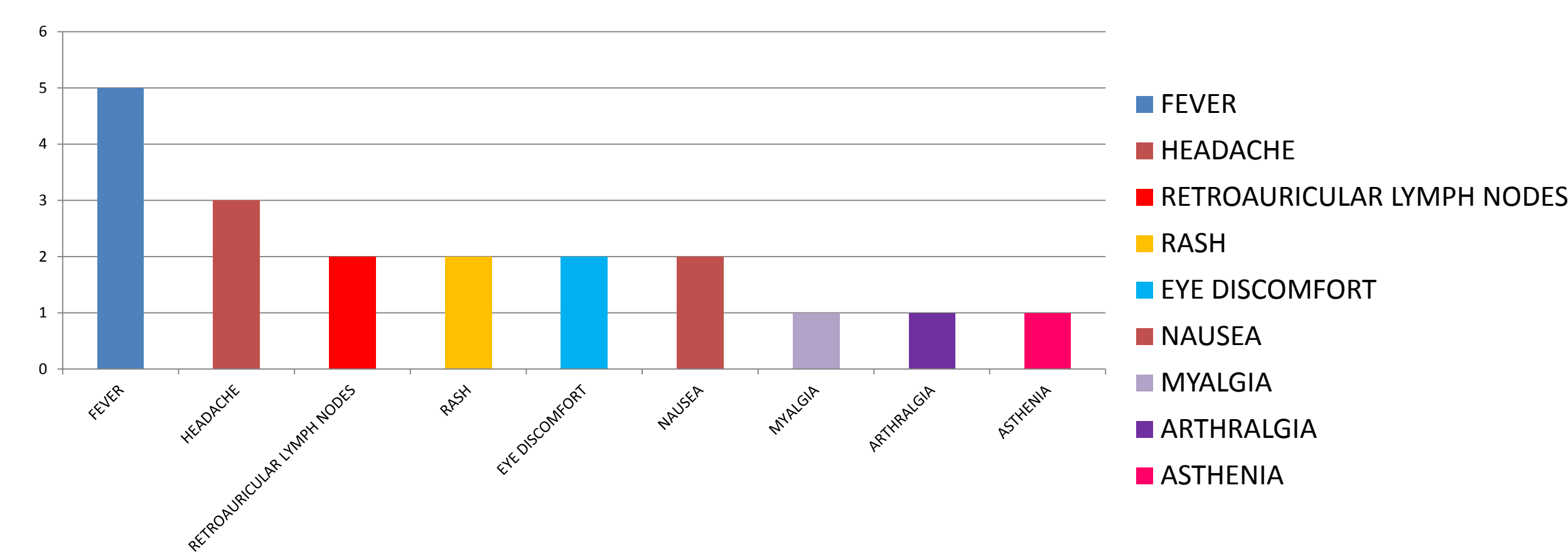
The questionnaire included demographic and clinical information. Zika virus diagnostic was done by RT-PCR and/or Zika IgM-IgG. RT-PCR was "in house" method based on primer/probe published by CDC. Serology IgM and IgG was done by ELISA Euroimmune® kit.

Results

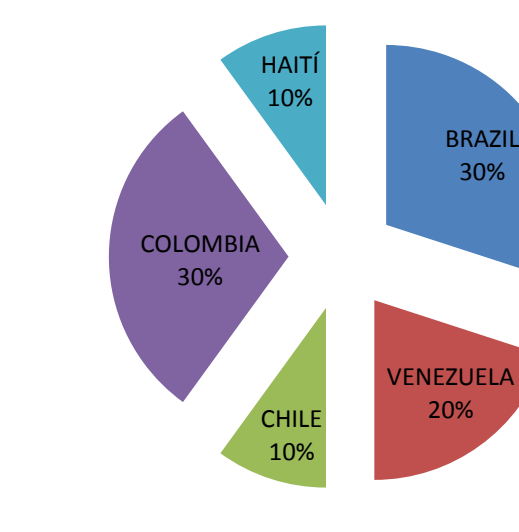
Twelve patients were positive to Zika. Mean age 31,4 years old (15-51 years). 7 women. 10 patients participated and answered the questionnaire. 9 cases were imported vector borne cases, a pregnant woman among them.

The onset of symptoms was 1 to 9 days after return.

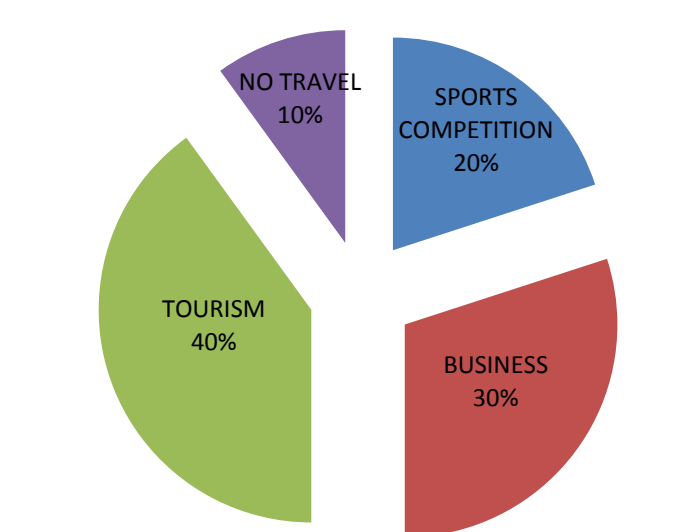
First Symptoms:



COUNTRY OF EXPOSURE

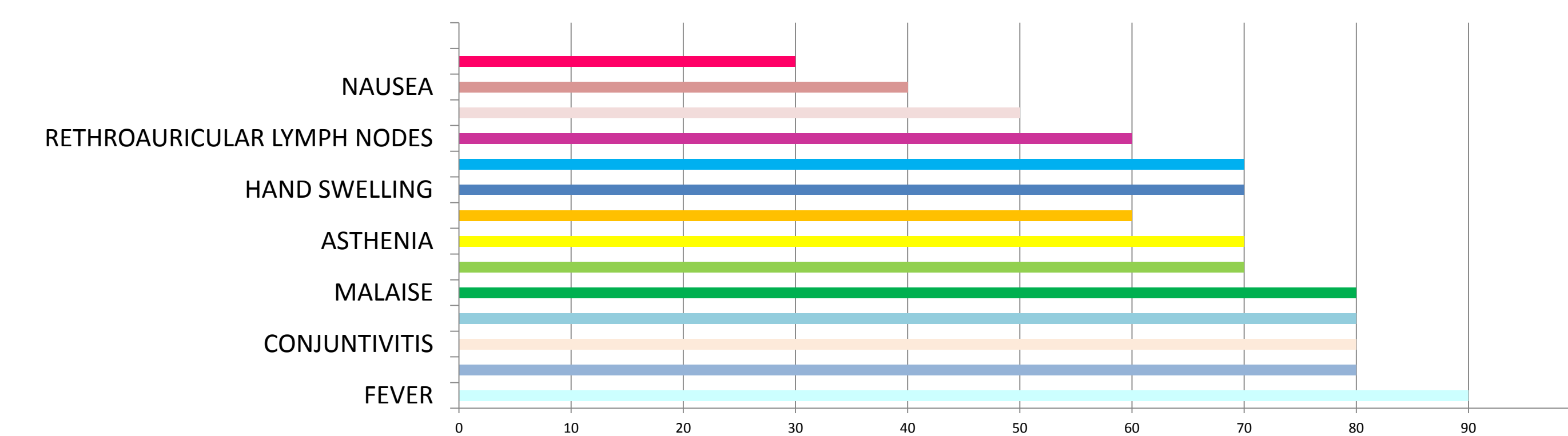


REASON FOR TRAVEL



- The average travel duration was 11 days (3-21 days).
- The mean temperature was 38,1° C (37,5-38,8° C) lasting 3 days in average (1-7 días)
- Arthritis duration: 3 to 15 days, the main joints affected were hands, elbow, and knees.
- Pregnant woman had 28 weeks of gestation when became infected and was diagnosed 2 month later by a IgM and IgG positive for Zika. The newborn was asymptomatic, with negative RT-PCR in urine and blood, positive IgG and negative IgM at birth. A normal psychomotor development, and normal cerebral ultrasound and a decrease in IgG and negative IgM during follow up.
- SEXUAL TRANSMISSION: This one case was acquired locally transmitted from a symptomatic male to his female partner. The transmission occurred 6 to 12 days from sexual intercourse.

Symptoms frequency in patients with Zika infection



Conclusions

Zika virus infection should be part of the differential diagnosis in Chilean travelers returning with rash with or without fever. It also has to be suspected in patients with characteristic symptoms, specially pruritic exanthema in sexual partner of travelers coming from endemic areas.

This diagnosis should also be suspected in patients with characteristic symptoms coming from areas with the presence of the vector but no previous Zika reported cases, like Arica (North of Chile) and Easter Island.

1) <http://www.cdc.gov/zika/geo/active-countries.html>
 2) <https://www.travax.com/library/zika#epidemiology>