

Factors associated with lethality of hantavirus in Southeastern Brazil, 2007-2014

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Abstract

Study on the spatial distribution and epidemiological and clinical variables of 286 reported cases and deaths from hantavirus in Southeastern Brazil.

Key words: hantavirus, zoonosis, lethality, spacial distribution

Introduction

Hantavirus is a zoonotic disease that results from infection by a virus of the family Bunyviridae. The clinical spectrum of the disease is varied, occurring from asymptomatic cases with mild cases to severe forms of the disease. The objective of this study is to analyze the factors associated with lethality of hantavirus and study the spatial distribution of cases and deaths in municipalities in the state of São Paulo and Minas Gerais, 2007-2014.

Results and Discussion

We studied 286 reported cases of hantavirus in the Southeast, with 140 cases in São Paulo, 145 in Minas Gerais and only one in Rio de Janeiro. The distribution of hantavirus presents seasonality, with higher incidence between March to June, which is probably related to climate conditions for the reproduction of rodents and contact with humans in the Southeast. The lethality of this zoonosis is high, with 47.1% in São Paulo and 39.3% in Minas Gerais. Most cases of hantavirus occurred in males and in the productive age group of 19 to 39 years. It was observed that most of the deaths occurred within the first week after onset of symptoms.

Table 1. Number of days between the first symptoms and the death or cure of hantavirus in the Southeast, Brazil, from 2007 to July 2014.

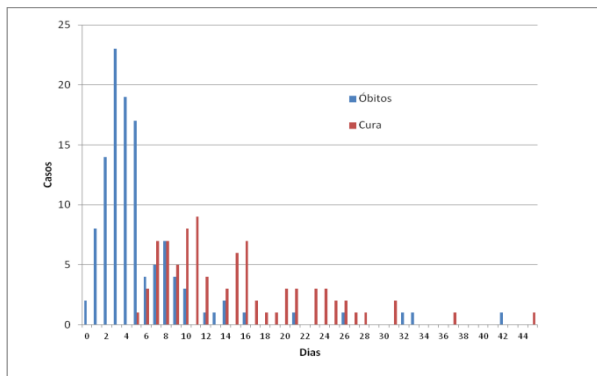
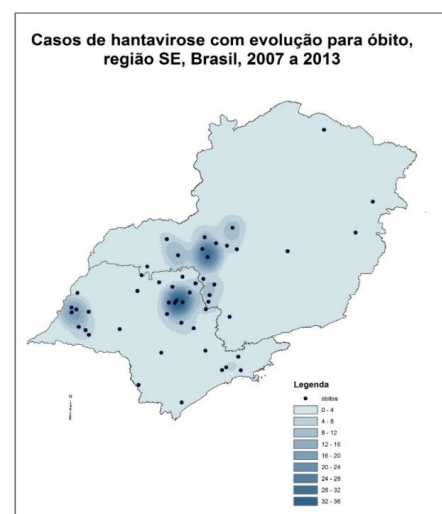


Figure 1. Map of the cases of hantavirus evolving to death in the Southeast Brazil, from 2007 to 2013.



Conclusions

The results reinforce the acute nature of the disease, rapid evolution and the need for early diagnosis and treatment, especially in the face of initial non-specific symptoms (fever and dyspnea).

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