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LETTER TO THE EDITOR

Severe abdominal pain in a patient with Zika infection: A case in Risaralda, Colombia



Zika virus (ZIKV), an arthropod-borne virus (arbovirus) of the family Flaviviridae, genus *Flavivirus*, transmitted by mosquitoes of the *Aedes* genus, especially *Aedes aegypti* and *Aedes albopictus*, has recently emerged in tropical areas of Latin America, particularly in Brazil and Colombia, as a public health threat since May 2015, when significant expansion, imported, but particularly autochthonous cases in previously dengue (DENV)- and chikungunya (CHIKV)-endemic region begun to be reported and extended over the territories [1,2].

Whilst neurological manifestations, including Guillain–Barré syndrome (GBS) have been mentioned in many reports in association with ZIKV and even with CHIKV [3,4], abdominal pain has not been previously reported linked to this arboviral infection. We report the first RT-PCR confirmed and published herein case of ZIKV infection from Risaralda, Colombia, which presented fever, arthralgias, myalgias, neutropenia and severe abdominal pain.

The patient was a 55-year-old woman, previously healthy, who in September 2015 was admitted to the Hospital Cristo Rey (a primary level public hospital), Balboa municipality, Risaralda Department, Colombia (town where no previous cases of ZIKV were known, but dengue and chikungunya have been reported), presenting 2-day of fever, chills, malaise, cephalgia, generalized and symmetric myalgias and arthralgias, generalized maculopapular rash and severe abdominal pain, with no conjunctivitis at the moment. Her abdominal pain was localized at right hypochondrium, with no irradiation. Patient also presented scleral icterus and a tongue pale and yellowish. Two weeks earlier patient visited La Virginia municipality, a highly endemic area for DENV and CHIKV of Risaralda department, but not confirmed circulation of ZIKV there at that moment.

At the physical examination a pulse rate of 83 beats/min and blood pressure of 130/70 mmHg

were found. Her temperature was 38.5 °C. She presented with generalized pain, with no lymphadenopathies, with a normal cardiovascular assessment. His abdominal pain showed no Murphy's sign. No hepatomegaly nor splenomegaly was found. Her neurological evaluation was normal, including no signs of GBS. Her ophthalmological was also normal. A complete blood count (CBC) showed no thrombocytopenia (321,000 cells/ml), a leukocyte count of 3.1×10^9 cells/L (48% neutrophils, 50% lymphocytes), a hemoglobin level of 15.2 g/dL, a hematocrit of 45%, and a total bilirubin of 1.2 mg/dL (direct bilirubin of 0.15 mg/dL). Giving these manifestations, case was considered as a DENV infection with alarm signs. Giving circulation of DENV, CHIKV and ZIKV in the country, blood samples for test against these arboviruses were took 4 days after beginning of symptoms. A later CBC found no thrombocytopenia (228,000 cells/ml), a leukocyte count of 6.8×10^9 cells/L (52% neutrophils, 48% lymphocytes), a hemoglobin level of 14.2 g/dL, a hematocrit of 45%, a total bilirubin of 0.62 mg/dL (direct bilirubin of 0.18 mg/dL) and an alanine transaminase of 18 mg/dL. An abdominal ultrasound was normal. Patient remained hospitalized under observation and symptomatic treatment. After four days, fever subsided and also the abdominal pain. RT-PCR for DENV and CHIKV were negative but positive for ZIKV. This was confirmed at the National Institute of Health of Bogotá and notified to the national Zika surveillance system (Secretary of Health of Risaralda).

Although cases of severe ZIKV infection are rare [5], the spectrum of clinical disease remains uncertain and considering the rapidly evolving epidemics of this new arbovirus in Latin America, this deserves further and detailed assessment. Clinicians should consider ZIKV in the differential diagnosis of dengue-like infection in patients from or returning from endemic areas in Colombia and Latin America where these arboviruses are currently co-circulating. In the case of abdominal pain as manifestation this is commonly seen and reported in DENV infection but not in CHIKV nor

ZIKV [6–9]. Then, atypical ZIKV cases would be occurring and should be considered. Very recently associated deaths have been reported [10], and the Ministry of Health is acknowledging those ZIKV associated fatalities. Even more, DENV, CHIKV and ZIKV, should be all tested, because also coinfections can occur [11].

Cases of ZIKV, begun to be reported in Colombia in September 2015, being this among the first outside the north Coast Caribbean region of the country, where epidemics has been concentrated. Until January 2016, 20,297 cases have been reported in Colombia, with 1050 confirmed by RT-PCR.

More research on ZIKV is required, as there is still very limited information on many clinical aspects of this new arboviral threat in the region [2,8], even few case reports from Latin America [9]. To the best of our knowledge this is the first case published from Colombia with such clinical association and may also in the region.

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Competing interests

None declared.

Ethical approval

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