DIFFERENTIATING DENGUE AND CHIKUNGUNYA: A characterization of clinical and laboratory features from Guayaquil, Ecuador

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BACKGROUND

Globally, over the past two decades Dengue (DEN) and Chikungunya (CHIK) viruses have caused multiple outbreaks, particularly in tropical and subtropical areas [1]. In Ecuador, the first case of Chikungunya fever (CHIK) was reported in October 2014 imported from Colombia. Since then the number of cases has increased progressively [2]. Dengue Fever (DEN) and CHIK have similar clinical presentations and commonly co-circulate in the same geographic areas leading to confusion in the diagnoses [1]. The most common clinical manifestations for both diseases are persistent fever, headache, myalgia, arthralgia and cutaneous rash [1,3]. However, it is important to differentiate between infections because as opposed to CHIK, DEN has a greater risk of plasma leakage that contributes to shock, end-organ damage, and poor prognosis if not managed properly [4].

METHODS

This study aims to identify clinical and laboratory patterns that differentiate CHIK and DEN infection that may aid in more rapid and accurate diagnosis and deployment of appropriate management to improve patient prognosis.

RESULTS

The current study demonstrates the difficulty in distinguishing DENV from CHIKV infection and the diagnostic dilemma that presents when concomitant outbreaks of both diseases occur. Results from the current study demonstrate that a complete blood count indicating low leukocytes and platelets in an endemic area of DEN better supports a diagnosis of dengue as opposed to CHIK.

REFERENCES