

Letter to Editor

Leptospirosis: Old and New Concerns

Vitorino Modesto dos Santos*

Armed Forces Hospital and Catholic University, Brasília-DF, Brazil

LETTER TO EDITOR

The risks of infections from animals to humans increase if susceptible individuals do not have awareness about the mechanisms of transmission in a variety of environments. *Leptospirosis* is a main cosmopolitan anthroponosis with significant adverse effects in Human Medicine, often related to misdiagnosis, or unsuspected and late diagnoses [1-5]. Natural reservoirs of *leptospiras* are wild and domestic animals, whereas professional, sport and leisure activities make easier direct and indirect contacts with the agent [3,5]. Human exposure often involves a contact of the skin and *Leptospira*-contaminated water; therefore, *leptospirosis* is a recurrent disease in hot and rainy season of tropical zone [5]. Classical features including fever, headache, myalgia, arthralgia, jaundice, renal failure and hemorrhages (Weil's syndrome) frequently contribute to early diagnosis and control, but under diagnoses are often due to lack of specific tests in the low income regions [1-5]. On the practical stand point, the possibility of severe complications increases in anicteric courses of disease that can evolve under diagnosed and without prompt treatment [1-3]. Major concerns include human endemic arboviruses as Dengue, Chikungunya, Zika and Hantavirus, and malaria, which may have similar features with human *leptospirosis*; additionally, co-infections with these entities may occur in the same environment [1-3,5]. The outbreaks of some of these conditions may increase possible diagnostic pit falls [5], especially in primary care attention if health workers are not aware about this matter. More recent laboratory resources can constitute a promisor tool to solve diagnostic conundrum; however, novel sophisticated tests are cumbersome in developing countries. In this setting, there is a one-step multiplex real-time PCR assay that detects RNA of Chikungunya and Dengue viruses and *leptospiral* DNA in a routine diagnostic use [5]. Assays as the commented are useful to identification of these pathogens, either isolated or in co-infected individuals presenting clinical manifestations indicative of *leptospirosis*.

*Corresponding author

Vitorino Modesto dos Santos, PhD. Armed Forces Hospital, Estrada do Contorno do Bosque s/n, Cruzeiro Novo, 70658-900, Brasília-DF, Brazil, Tel: 55-61-39662103; Fax: 55-61-32331599; E-mail: vitorinomodesto@gmail.com

Submitted: 24 January 2018

Accepted: 24 January 2018

Published: 25 January 2018

ISSN: 2378-931X

Copyright

© 2018 dos Santos

OPEN ACCESS

This resource would have major role in public health actions against *leptospira* infections, because antimicrobial therapy is more effective if started in early phase of disease [3-5]. The manifestations of septicemic first phase have good improvement with antibiotic administration [1,3-5], including penicillin G, doxycycline, ampicillin, or ceftriaxone. The effectiveness of post-exposure prophylaxis with doxycycline remains nonconsensual, but it has been utilized for people with high-risk exposures during outbreaks after floods. Anamnesis with detailed data about occupation and leisure classical risk factors, and recent travels for endemic areas strongly contribute to early diagnosis of *leptospirosis*. Conjoint efforts of veterinarians and physicians to enhance the awareness of colleagues and people in general are essential to reduce the consequences of this anthroponosis. Therefore, the comments herein included might contribute to enhance the suspicion index of all protagonists of the of *leptospiral* multidisciplinary animal and human infections.

REFERENCES

1. Dos Santos VM. Manifestations and complications of leptospirosis. Med J Islam Repub Iran. 2016; 30: 337.
2. Dos Santos VM. Complicated Weil disease. Balkan Med J. 2016; 33: 480-481.
3. Santos VM, Santos UM, Gebrin DG, Santos AM, Cançado AC. Anicteric leptospirosis with pneumonitis, pericarditis and acalculous cholecystitis. Infez Med. 2014; 22: 236-240.
4. Dos Santos VM, dos Santos JA, Sugai TA, dos Santos LA. Weil's syndrome. Rev Cubana Med Trop. 2003; 55: 44-46.
5. Giry C, Roquebert B, Li-Pat-Yuen G, Gasque P, Jaffar-Bandjee MC. Simultaneous detection of chikungunya virus, dengue virus and human pathogenic *Leptospira* genomes using a multiplex TaqMan® assay. BMC Microbiol. 2017; 17: 105.