

Editorial



Chronic Obstructive Pulmonary Disease and Tropical Arbovirus Infection, From Dengue to Zika Virus Disease

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Arbovirus disease is an important group of infection that is caused by arthropod bite. The disease is the present public health problem worldwide. The tropical arbovirus infection is observable in several countries worldwide. Several arbovirus infections such as Dengue, Chikungunya and Zika virus infections are still the problems in global public health. Regarding the infection, acute febrile illness is the classical problem seen in arbovirus infection. The occurrence of disease in cases with other concurrent medical disorder is very interesting. The interrelation between background medical disorder and the arbovirus infection is an interesting issue for medical researching of several possible underlying problems, Chronic Obstructive Pulmonary Disease (COPD) is a possible problem that might coexist with tropical arbovirus infection but the interrelationship between the two disorders is little mentioned in the literature.

In fact, there are some reports regarding COPD and tropical arbovirus infection. For Dengue, the common tropical mosquito borne infection, COPD is related with increased fatality in the elderly with dengue hemorrhagic fever [1]. The patients with underlying COPD might have chance to get superimposed infection in case that they have dengue. The good example of superimposed infection is aspergillosis [2]. For Chikungunya, another important arbovirus infection, there is no specific report on the interrelationship with COPD. For the Zika virus infection, the emerging problem in the present day, there are some reports on the relationship between Zika virus infection and COPD. In a recent report from Suriname [3], the fatality of Dengue is reported in case with underlying COPD. In the Suriname report [3], the patient had atypical clinical presentations, including arthralgia and diarrhea, and had a rapid clinical deterioration leading to death. In another report from USA, COPD might be a concurrent problem in Zika virus infected patients and there might be the association with increased risk of neurological complication [4].

The pathophysiology of the coexistence of COPD and arbovirus infections is an interesting issue. The COPD patient might have impaired resistance to disease and can develop increase severe clinical problem of arbovirus infection. The high mortality rate among the cases with underlying COPD can be observed [1-3]. However, there is still lack of study on the interrelationship between COPD and arbovirus infection. The importance of this clinical association need to be better explained. Hence, the issue on interrelationships between arbovirus infection and COPD is an interesting

issue for further research in pulmonology. The special focuses should be given to new emerging problems such as Zika virus infection.

Conflict of Interest: None

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