Abstract

Rocky Mountain Spotted fever is a tick vector disease caused by an obligate intracellular bacteria, Rickettsia rickettsii. It is a severe systemic illness caused by the infection of endothelial cells of small vessels of most organs and tissues of the human body. It is the most lethal tick-born disease and since its discovery more than 100 years ago it still appears sporadically, but persistently. Although there is treatment with effective antibiotics, mortality rates are near 10% and infected patients require intensive care when the illness is misdiagnosed and there is a delay in treatment. Other species of ticks and new species of rickettsia have been described recently related to Spotted Fever diseases and although the pathogenesis of the disease has been elucidated in part, there are a lot of questions concerning the mechanisms of virulence.

Keywords

Rickettsia rickettsii, Rocky mountain spotted fever, pathogenesis, virulence, diagnosis, epidemiology, insect vectors, Costa Rica.