Minireview on Sand Fly Fever

A Mehrabi Tavana
Department of Medical Microbiology, Faculty of Medicine, Baqiyatallah (a.s),
University of Medical Sciences, Tehran, Iran

Abstract: Little is known about sand fly fever with manifestations such as severe fever, headache and photophobia. The diseases is endemic in many Middle East countries and it supposed many patients are referred to Medical center, without correct diagnosis and perhaps treatment. This mini-review article describes the situation of diseases at the present time which may be useful for interested scientists.

Key words: Sand fly fever, disease, Middle East, Persian Gulf

INTRODUCTION

Sand fly fever that is also called three day fever, papataxi fever and phlebotomous fever (Mehrabi Tavana et al., 1999).

It is one of the arbovirus diseases which can be transmitted via sand fly bite (Cross and Hyams, 1996; Cross et al., 1996; Tesh and Chamiotis, 1975) and transovarial transmission of virus within phlebotomus species. Sand fly fever virus can be classified as a bunyaviridae family viruses (Mehrabi Tavana, 2001). Many serotypes of virus as sand fly fever have been reported so far, but, Sicilian and Naples are the most prevalent cases in many infected countries amongst the other serotypes (Mehrabi Tavana, 2001 , Crance et al., 1997). Naples virus was found by Sabin and Paul in 1924 during an outbreak of the disease in Naples county, Italy. Sicilian virus was isolated from Italian soldiers during World War II (Mehrabi Tavana, 2001). It has to be said that, many rodents could be acted as a reservoir of the disease (Mehrabi Tavana, 2001). Based on many documents, it’s believes that, the disease caused many problem in Persian Gulf regions during World War II (Mehrabi Tavana, 2001). Iran the disease well described by Javadian (1977), Saidi et al. (1977) Tesh et al. (1976 and 1977). Mehrabi Tavana (1999 ) and Mehrabi Tavana (2001). Possibly the life cycle of disease is circulated among rodents, domestic animal and human and it may be P. papataxi is the main Vector of Sand fly fever. Perhaps other species may be involved. The Fig. I shows the life cycle of arboviruses including sand fly fever. Serological test has been used for identification of virus So far (Mehrabi Tavana et al., 1999). No molecular test has been applied for investigation of virus so far.

DISCUSSION

Still little is known regarding sand fly fever in particular it's epidemiological clinical diagnosis and control aspects of infection. It has to be said the disease causes problem in World War I and II. Since that the disease was seen in different area in particular in Middle East, Persian Gulf and part of Europe (Mehrabi Tavana et al., 1999; Mehrabi Tavana, 2001; Bryan et al., 1996; Sánchez-Seco and Navarro, 2005; Verani et al., 1995). Different serotypes of viruses has been described in the last decades. However in spite of present of Vector P. papataxi in different continents no report has been published yet from different part of world. It supposed the disease may be present in other continent too. Non immune person such as travelers highly suspecible to get the infection
Fig 1: Life cycle of arboviruses (Sánchez-Scoco and Navarro, 2005)

(Mehrab Tavana, 2001). Because of no vaccine available to prevent the infection. Therefore, precaution measures must be taken for people who are traveling to tropical or semi-tropical countries (Mehrab Tavana et al., 1999; Mehrabi Tavana, 2001; Bryan et al., 1996; Sánchez-Seo and Navarro, 2005).

REFERENCES


