

SINDBIS

Introduction

Sindbis is a vector-borne alphavirus that produces a disease characterized by fever, rash, and polyarthrititis. This virus is part of the Togaviridae family, which includes the more commonly recognized eastern equine encephalitis and western equine encephalitis viruses. The most recognized member of the Togaviridae family is the virus that causes rubella. The virus is a positive-stranded RNA virus.

Epidemiologic Information

Because of this common viral vector, in the Middle East it is common to find individuals who are positive for exposure to Sindbis to also be positive for exposure to West Nile virus.

Clinical Presentation

- myalgias
- malaise,
- arthralgia - wrist, fingers, hips, knee and ankle. Swollen joints do not show significant fluid accumulation.
- Rash

Diagnosis

The virus can be isolated from blood or vesicle fluid during the acute phase of the infection. Nonspecific laboratory tests include mild leukopenia and elevation of acute phase reactants, and the identification of a rising specific anti-body titer.

Treatment and Prevention

As with other members of this virus group, treatment is supportive and with time (usually a short period but perhaps up to several months), the symptoms resolve.

Prevention, as with other arboviruses, centers on decreased exposure to the potentially infective mosquito through the use of repellants and the wearing of clothing that covers the body, particularly when the mosquito population is abundant.

RIFT VALLEY FEVER

Introduction

primarily in the summer months when the mosquito population increases.

Clinical Presentation

fever, drowsiness, frontal headache, ocular pain, and abdominal and back pain, facial flushing, conjunctivitis, and coating of the tongue

moderate lymph node enlargement (occipital, axillary, inguinal) with some tenderness

Diagnosis

Nonspecific laboratory tests include leukopenia (total white blood cell count less than 4000/ μ L). Viral isolation (during infection) or the identification of a rising specific antibody titer.

Treatment and Prevention

For infected patients, the goal is to treat the symptoms. There are no specific treatments for West Nile fever. Prevention involves reducing exposure to the mosquito population in endemic areas.

LEISHMANIAVIRUS

Introduction

Leishmanivirus is a double-stranded RNA virus that infects some strains of *Leishmania*. Leishmanivirus has some unusual characteristics; specifically, the viral capsid protein is an RNA endonuclease that may be responsible for some of the viral persistence characteristics

Epidemiologic Information

Little is known about this virus. However, in a study of human biopsy tissues collected in 1996 as part of a drug treatment program in Cuzco, Peru, viral RNA was identified in two of 11 samples studied by molecular diagnostic techniques

Clinical Presentation

Much more evaluation needs to be completed to understand whether infection of *Leishmania* with Leishmanivirus alters the pathogenesis of the protozoa in humans.

Diagnosis