Chikungunya Fever

Florida HEALTH

Merlin disease code: 06540 Chikungunya Fever

Acute and convalescent sera from cases without recent (2 weeks prior to symptom onset) international travel should be sent to the Bureau of Public Health Laboratories

Paper case report form

Merlin extended data required

Clinical criteria for case classification

Acute phase symptoms include a sudden onset of continuous or intermittent high fever (usually >102° F) with severe joint pain in >2 joints. Tendons may also be involved. Joint and tendon pain commonly involve the hands and feet, is usually bilateral, and often is accompanied by swelling. Other joints may be involved and back pain is reported in up to 50% of cases. Maculopapular rash is reported in approximately half of all patients, usually 2-5 days after fever onset. Other symptoms may include headache, fatigue, depression, nausea, vomiting, and muscle pain. Mild thrombocytopenia, leukopenia, and elevated liver function tests may be reported.

Relapse of joint and tendon pain can occur after initial improvement of clinical signs; relapse is most common 1-3 months after symptom onset. Some patients have prolonged fatigue and depression lasting weeks or months.

Laboratory criteria for case classification

Confirmatory:

One or more of the following:

- Isolation of virus from, or detection of specific viral antigen or nucleic acid in tissue, blood, CSF, or other body fluid (e.g., culture, immunohistochemistry [IHC], polymerase chain reaction [PCR]);
- **Or** fourfold or greater change in virus-specific quantitative antibody titers in paired sera (e.g., enzyme immunoassay [EIA], microsphere immunoassay [MIA], immunofluorescence assay [IF]);
- **Or** both of the following:
    - Virus-specific IgM antibodies in serum
    - **And** confirmatory virus-specific neutralizing antibodies in the same or a later specimen (e.g., plaque reduction neutralization [PRNT]).

Presumptive:

Both of the following:

- Virus-specific IgM antibodies (e.g., EIA, MIA, IF) in serum
- **And** absence of negative virus-specific IgM antibodies (e.g., EIA, MIA, IF) from a state public health laboratory.

Epidemiological criteria for case classification

Not applicable.

Case classification

Confirmed:

A clinically compatible illness in a person with confirmatory laboratory criteria.

Probable:

A clinically compatible illness in a person with presumptive laboratory criteria.

Suspect:
A person with confirmatory or presumptive laboratory criteria.

Criteria to distinguish a new case from previous reports

Not applicable.

Comments

Chikungunya fever and dengue fever are difficult to differentiate clinically. Maculopapular rash is more frequent in chikungunya fever and polyarthralgia or pain in a chikungunya fever case is often more localized in joints and tendons, particularly the hands and feet, and may be associated with visible swelling. Signs of shock or hemorrhage are much less commonly reported for chikungunya fever compared to dengue fever. It is also important to note that chikungunya fever and dengue fever can occur as co-infections.

Suspect cases of chikungunya or dengue fever should have specimens submitted for appropriate testing (PCR or EIA/IF) for both viruses.

For additional information about arboviral disease, see the most recent Surveillance and Control of Selected Arthropod-Borne Diseases in Florida Guidebook (www.floridahealth.gov/%5C/diseases-and-conditions/mosquito-borne-diseases/index.html).