Supplementary Material*

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Complicated Dengue Questionnaire

* This supplementary material was provided by the authors to give readers further details on their article. The material was not copyedited.

Complicated Dengue Questionnaire

GeoSentinel, 2022

GeoSentinel ID:_____

GENERAL INFORMATION

1. What was the patient's age in years (at time of recruitment)? _____
2. What is the patient's sex?
   Male Female Undisclosed
3. What is the patient's height? (cm) _____ Height not available
4. What is the patient's weight? (kg) _____ Weight not available
5. What is the patient's country of residence? [drop down] _____ Unknown
6. What is the country where the patient was exposed? [drop down] _____ Unknown
7. What was the type of travel?
   Tourism VFR (visiting friends and relatives) Business Student
   Humanitarian aid (e.g., NGO) Expatriate Unknown
8. What was the duration of travel?
   < 2 weeks ≥ 2 and < 4 weeks ≥ 4 and < 12 weeks ≥ 12 weeks Unknown
9. Is this the first time the traveler had dengue?
   Yes No Unknown
10. If this was not the first clinically manifest episode, in what year did the traveler have dengue?
    (YYYY) _____ Unknown
11. Was the traveler hospitalized for dengue during travel?
    Yes No Unknown
12. Was the patient vaccinated against any flavivirus at any point before travel?
    Yes No Unknown
    If yes, did they receive:
    Yellow fever vaccination
    Tickborne encephalitis vaccination
    Japanese encephalitis vaccination

COMORBIDITIES

1. Did the traveler have any comorbidities?
   Yes No Unknown
   If yes:
   Hypertension Yes No Unknown
   Neurological diseases Yes No Unknown
   If yes, diagnosis _____
   If yes, use of immunosuppressants None Corticosteroids Other
   Rheumatological disease Yes No Unknown
   If yes, diagnosis _____
   If yes, use of immunosuppressants None Corticosteroids Other
   Organ transplantation Yes No Unknown
   If yes, which organ _____

If yes, use of immunosuppressants None Corticosteroids Other

Chronic hepatitis Yes No Unknown

Congestive heart failure Yes No Unknown

Chronic kidney failure Yes No Unknown

Diabetes mellitus Yes No Unknown

Cancer Yes No Unknown

If yes, diagnosis _____

If yes, currently on chemotherapy Yes No Unknown

Obesity Yes No Unknown

Pregnancy Yes No Unknown

Chronic respiratory disease Yes No Unknown

If yes, diagnosis _____

If yes, use of immunosuppressants None Corticosteroids Other

HIV infection Yes No Unknown

Viral load (most recent VL before dengue episode) (copies/mL) _____

CD4 count (most recent CD4 count before dengue episode) (cells/mm3) _____

SIGNS AND SYMPTOMS (at any point during the course of illness)

1. Did the patient have a fever (temperature >38°C)?
   Yes No Unknown
2. Did the patient have a headache?
   Yes No Unknown
3. Did the patient have retro-orbital pain?
   Yes No Unknown
4. Did the patient experience fatigue?
   Yes No Unknown
5. Did the patient have a rash?
   Yes No Unknown
6. Did the patient have a sore throat?
   Yes No Unknown
7. Did the patient have a cough?
   Yes No Unknown
8. Did the patient have lymphadenitis?
   Yes No Unknown
9. Did the patient have arthralgia?
   Yes No Unknown
10. Did the patient have myalgia?
    Yes No Unknown
11. Did the patient have abdominal pain?
    Yes No Unknown
12. Did the patient vomit?
    Yes No Unknown
13. Did the patient have diarrhea?
    Yes No Unknown
14. Did the patient have any additional signs or symptoms not listed above?
    If yes, list additional signs or symptoms _____

HOSPITALIZATION

1. Was the patient hospitalized?
   Yes No Unknown
   If yes, what was the duration of hospitalization (days) _____
   If yes, did the patient have hospital-acquired coinfections during hospital admission?
   Yes No Unknown
   If yes, diagnosis _____
   If yes, was the patient admitted to an intensive care unit (ICU)?
   Yes No Unknown
   If yes, what was the duration of ICU admission/stay (days) _____
   If yes, did the patient have inotropic support?
   Yes No Unknown
   If yes, did the patient have mechanical ventilation?
   Yes No Unknown
   If yes, did the patient have renal replacement therapy (hemodialysis)?
   Yes No Unknown
   If yes:
   What was the maximum recorded temperature during admission? (degrees Celsius) ____
   What was the lowest recorded systolic blood pressure during admission? (mmHg) ____
   What was the lowest recorded diastolic blood pressure during admission? (mmHg) ____
   What was the highest recorded heart rate during admission? (beats per minute) _____
2. Did the patient survive the dengue episode?
   Yes No Unknown
3. Did the patient have sick leave (absence from school or work)?
   Yes No Unknown
   If yes, please indicate the duration of sick leave
   < 2 weeks ≥ 2 and < 4 weeks ≥ 4 and < 12 weeks ≥ 12 weeks Unknown
4. Was hepatomegaly present?
   Yes No Unknown
5. Was splenomegaly present?
   Yes No Unknown

MEDICAL IMAGING AND FINDINGS

1. Was imaging of the brain performed (MRI or CT)?
   Yes No Unknown
   If yes, was imaging of the brain consistent with encephalitis?
   Yes No Unknown
   If yes, was imaging of the brain consistent with cerebral hemorrhage?
   Yes No Unknown
   If yes, was imaging of the brain consistent with cerebral infarction?
   Yes No Unknown
   If yes, was imaging of the brain consistent with preexisting parenchymal abnormalities?
   Yes No Unknown
2. Was a lumbar puncture performed?
   Yes No Unknown
   If yes:
   Red blood cell count (per µL)_____

White blood cell count (per µL)_____
% lymphocytes _____
% monocytes _____
% neutrophils _____
% eosinophils _____
Protein (mg/dL) _____
Glucose (mg/dL) _____
Anti-DENV IgM present in CSF Yes No Not done
DENV RT-PCR positive in CSF Yes No Not done

3. Was ophthalmological exam normal?
   Yes No Unknown
   If no, diagnosis _____
4. Did the patient have thrombocytopenia?
   Yes No Unknown
   If yes, specify
   Moderate (platelet count 50,000 to 20,000/mm3)
   Severe (platelet count <20,000/mm3)
5. Did the patient have bleeding manifestations?
   Yes No Unknown
   If yes, please specify
   Dry bleeds (petechiae, ecchymoses)
   Bleeding that required local intervention, but did not result in shock or hemodynamic instability
   Bleeding that involves a critical organ
   Bleeding that leads to hemodynamic instability
   Bleeding that results in death or permanent disability
   Bleeding that requires a red blood cell transfusion AND requires monitoring in an intensive care unit or high dependency unit
6. Was cardiac imaging (ultrasound) performed?
   Yes No Unknown
   If yes, was pericardial effusion present?
   Yes No Unknown
   If yes, was pleural effusion present?
   Yes No Unknown
7. Was computed tomography (chest and/or abdomen) performed?
   Yes No Unknown
   If yes, was gallbladder wall thickening present?
   Yes No Unknown
   If yes, was ascites present?
   Yes No Unknown
8. Was ultrasound (chest and/or abdomen) performed?
   Yes No Unknown
9. Did the patient have signs of plasma leakage?
   Yes No Unknown
   If yes, specify:
   Hematocrit change of >15%, AND/OR pleural effusion AND/OR ascites AND/OR cardiac effusion; but NO evidence of hemodynamic instability or respiratory compromise

Hematocrit change of >20%, AND/OR pleural effusion AND/OR ascites AND/OR cardiac effusion; AND evidence of HEMODYNAMIC instability or RESPIRATORY compromise

10. Did the patient have signs of myocarditis?

    Yes No Unknown

    If yes, specify:

    Acute illness with discrete onset of signs and symptoms consistent with acute viral myocarditis (e.g., elevated troponin, CPK-MB, or sera soluble ST2 (sST2) above the laboratory upper limits of normal)

    Evidence of new onset cardiac arrhythmia and/or ST2 elevation > 1mm, QRS complex changes (Q waves > 0.04 sec and >0.25 of the amplitude ofR wave), or symmetric negative T waves

    Need for inotropic support, and/or has evidence of myocardial dysfunction from echocardiogram, (i.e., reduced left ventricular function despite adequate filling of left ventricle (normal left ventricle end diastolic diameter) and adequate volume status

11. Did the patient have signs of liver disease?

    Yes No Unknown

    If yes, did the patient have signs of moderate liver disease (all 3 criteria)?

    Moderate liver disease defined as:

    1. acute illness with discrete onset of signs and symptoms consistent with acute viral hepatitis (e.g., fatigue, abdominal pain, loss of appetite, intermittent nausea, vomiting, dark urine, clay-colored or light stools);

    2. alanine aminotransferase (ALT) greater than 10 times the upper limit of normal (grade 4 toxicity in the FDA 2007 toxicity tables) or > = 400 U/L;

    3. does not meet criteria for acute liver failure (i.e., no mental status changes and international normalized ratio (INR) < 1.5)

    Yes No

    If yes, did the patient have signs of severe liver disease (all 3 criteria)?

    Severe liver disease defined as:

    1. acute viral hepatitis

    2. change in mental status

    3. new onset coagulopathy defined by an international normalization ratio (INR) ≥1.5

    Yes No

12. Did the patient have signs of neurologic disease?

    Yes No Unknown

    If yes, did the patient have signs of moderate neurologic disease (all 3 criteria)?

    Moderate neurologic disease:

    1. abnormal neurologic examination with a Glasgow Coma Score >=12 but < 15 for < 2 days duration;

    2. neurologic involvement did not result in need for intubation, shunting or intensive care;

    3. neurologic involvement did not result in death or ongoing sequelae that impairs daily function for more than 48 hours?

    Yes No

    If yes, did the patient have signs of severe neurologic disease (all 3 criteria)?

    Severe neurologic disease:

    1. abnormal neurologic examination with a Glasgow Coma Score < 11 (adults); Pediatric Glasgow Coma Scale < 11 or a Blantyre coma score < 3 (children); AND

    2. neurologic involvement resulting in death or ongoing sequelae that impairs daily function,

3. received or was thought to require intubation, shunting, or intensive care or high dependency unit level of care if an intensive care unit is not available.

Yes No

DIAGNOSTIC EVALUATION – ACUTE PHASE (<72 hours of symptom onset)

1. Date of symptom onset
2. Anti-DENV IgM (OD/titer) _____ Not available
3. Anti-DENV IgG (OD/titer) _____ Not available
   Date antibody detection assays were performed (DD/MM/YY) _____
4. NS-1 result Positive Negative Not available
   Date NS-1 test was performed (DD/MM/YY) _____
5. RT-PCR result Positive Negative Not available
   Date RT-PCR assay was performed (DD/MM/YY) _____
6. DENV serotyping DENV1 DENV2 DENV3 DENV4 Not available

DIAGNOSTIC EVALUATION – CRITICAL PHASE

1. Date of symptom onset
2. Anti-DENV IgM (OD/titer) _____ Not available
3. Anti-DENV IgG (OD/titer) _____ Not available
   Date antibody detection assays were performed (DD/MM/YY) _____
4. NS-1 result Positive Negative Not available
   Date NS-1 test was performed (DD/MM/YY) _____
5. RT-PCR result Positive Negative Not available
   Date RT-PCR assay was performed (DD/MM/YY) _____
6. DENV serotyping DENV1 DENV2 DENV3 DENV4 Not available

DIAGNOSTIC EVALUATION – CONVALESCENT PHASE

1. Date of symptom onset
2. Anti-DENV IgM (OD/titer) _____ Not available
3. Anti-DENV IgG (OD/titer) _____ Not available
   Date antibody detection assays were performed (DD/MM/YY) _____
4. NS-1 result Positive Negative Not available
   Date NS-1 test was performed (DD/MM/YY) _____
5. RT-PCR result Positive Negative Not available
   Date RT-PCR assay was performed (DD/MM/YY) _____
6. DENV serotyping DENV1 DENV2 DENV3 DENV4 Not available