

20<sup>th</sup> Annual World Congress on **Pediatrics**  
 &  
 4<sup>th</sup> Annual World Congress on  
**Pediatric Nutrition, Gastroenterology and Child Development**  
 March 18 - 19, 2019 | Chicago, USA

SCIENTIFIC TRACKS | DAY 2

PEDIATRICS &amp; THERAPEUTICS 2019, VOLUME 9 | DOI:10.4172/2161-0665-CI-084

## Dengue virus: More than what meets the eye

**Chanique James**

Mandeville Regional Hospital,  
Jamaica

### Statement of the Problem:

Delayed investigations may result in skewed patient assessment especially with varied clinical presentations. A 2 year old male presented with fever, abdominal pains and generalized seizure activity two days after receiving Penadur for an exudative tonsillitis. Symptoms persisted resulting in depressed Glasgow Coma scale (GCS 10/15), associated with nystagmus, absent gag reflex, hypotonic upper limbs and hypertonic lower limbs, hyperreflexia and clonus. Currently, the patient is alive, but minimal neurological improvement is seen up to 3 months after presentation. Initial investigations revealed a hemoglobin of 7.8, thrombocytopenia of 61 and elevated transaminases. No electrolyte imbalance was noted. Dengue viral studies

done 6 days after symptom onset showed negative NS1 antigen and positive IgM and IgG antibodies. CSF analysis showed no cells, and no increase in CSF globulins. CSF dengue antigen and IgM antibodies and serum and CSF PCR was unavailable. TORCH, HIV, syphilis, hepatitis, or Zika virus investigations were negative. Cranial CT revealed possible pontine infarct with hypodensity in bilateral frontal lobe white matter, possibly ischemic or inflammatory in origin. Magnetic resonance diffusion weighted imaging of the brain, done 20 days after presentation, showed subtle T2 hyperintense signal changes in the posterior periventricular white matter, which may be related to ongoing myelination. Imaging suggests underlying metabolic disturbance, central-pontine myelinolysis or sequelae of infection. Although dengue is not considered a neurotropic virus, in recent years, there has been documentation of neurological complications associated with dengue fever.<sup>1</sup> These complications in general

are unusual. MRI findings are usually normal, but may vary. In a cohort of patients, findings include cerebral oedema, encephalitis-like changes and one patient had intracranial hemorrhage.<sup>2</sup> Diagnosis in this case is limited by the absence of CSF dengue antigen and IgM as well as CSF PCR. Also, MRI findings are time-sensitive and delayed imaging results in inability to assess acute intracranial changes.

### Biography

Chanique James is a medical graduate of the University of the West Indies, Mona Campus, located in Jamaica. She is a pediatric resident at the Mandeville Regional Hospital, a teaching hospital that caters to students from various medical schools across Jamaica and the Caribbean, and one that provides clinical services to patients in and around central Jamaica. Her interests lie in Neonatology and Pediatric Gastroenterology where she gains clinical experience daily while supervising junior doctors and medical students. In keeping with her passion for perinatology, she has spearheaded intermittent neonatal resuscitation workshops and teaching sessions for new staff, and assists in organizing research for quarterly perinatal conferences. When she is not strutting about the pediatric and NICU floors, she maintains her work life balance by keeping active in community medical outreach programmes and health promotion while aiming to experience the world, one cultural dish at a time

*chanique.james@gmail.com*