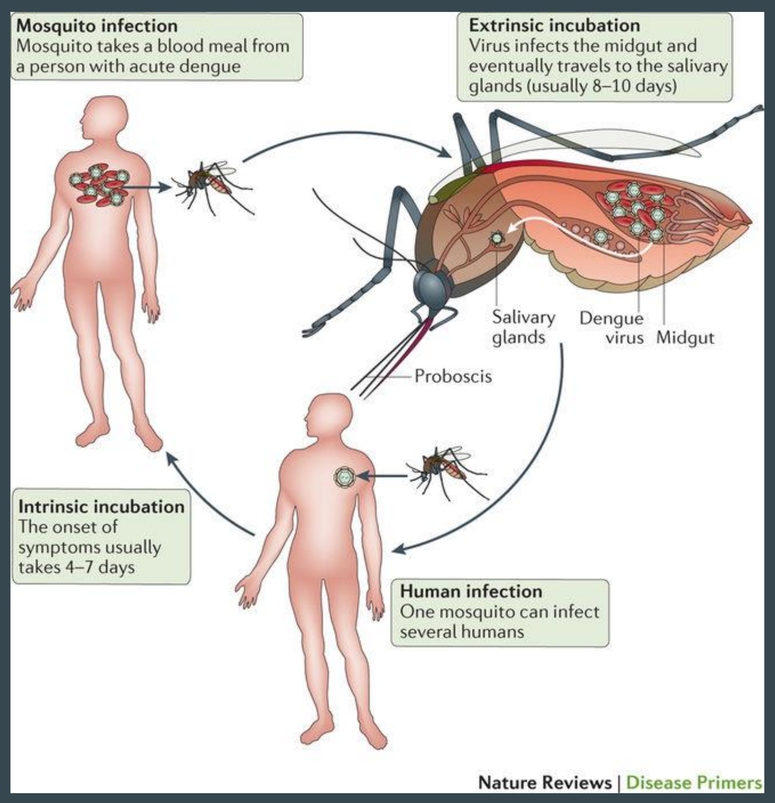
1789

Double Jeopardy: Recurrent Case of Dengue Fever

Benjamin Chou, MD. Silvio Goris, MD. Javeria Shakil, MD. Alessandro Solinas, MD
Flushing Hospital Medical Center

Introduction

Recurrent Dengue fever is uncommon but usually more fatal than the initial infection, as it can result in hemorrhagic fever, massive internal bleeding and severe liver damage. Oddly enough, immunity to one strain of the virus seems to make a recurrent infection with another strain even more severe.



Plasma leakage in various body cavities such as the pleural cavity, peritoneal cavity can lead to shock, known as Dengue Shock Syndrome. The duration of time patient is in DSS can lead to further worsening of the patients condition and eventually lead to multi-organ failure and ultimately death. With proper management and supportive care, mortality can be greatly reduced for patients who have dengue fever as well as recurrent dengue fever.

Case Presentation

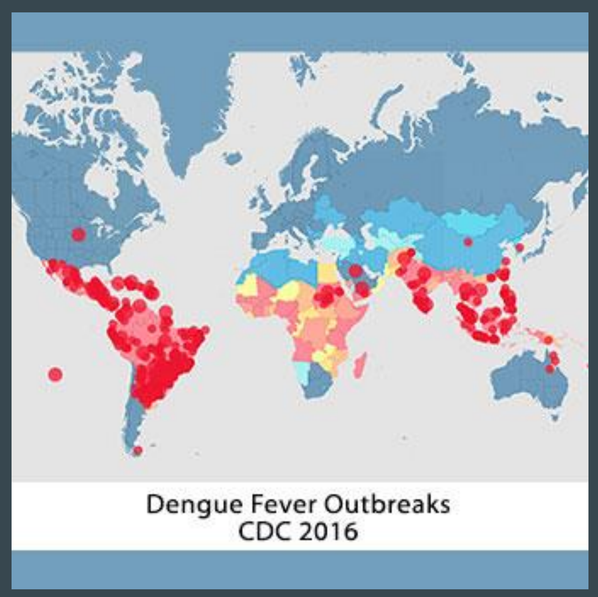
55 year old male with a PMH of DM2, BPH and HLD presented from home with generalized body aches and fevers for one week duration. Associated with headaches, nausea, diarrhea fevers along with joint pains and a diffuse itchy rash across the chest and abdomen. Patient also complained of dysuria without discharge. He denied abdominal pain, chest pain, shortness of breath or cough. He had recent travel to the Dominican Republic one week ago but denied any sick contacts.

His vitals were significant for low blood pressure of 101/63, tachycardia of 106 and a temperature of 101.8. On physical, he had a diffuse maculopapular rash on the chest and abdomen without petechiae. Lab studies showed anemia and mild hyponatremia. His urine analysis, chest x-ray and EKG were also normal.

Supportive care was initiated with IV fluids and pain control. Infectiosu disease was consulted, bacterial, viral and febrile infections workup were started. Patiend developed a fever, antibiotics were started empircally for bacterial infection. Subsequently, he developed thrombocytopenia with elevated LFTs and AKI. He also developed retro-orbital pain, scleral icterus and abdominal pain. Patient revealed that he had a similar episode 2 years prior and was diagnosed with dengue fever. His symptoms as well as elevated LFTs and thrombocytopenia resolved. Laboratory testing for Typhoid, HIV, Hepatits C, Influenza, Zika virus, Yellow fever and Chinkungunya were ruled out. The patient was discharged with positive antibodies to Dengue both IgM and IgG

Conclusion

Dengue fever is a non-contagious vector borne illness, transmitted by the *Aedes aegypti* mosquito. There are 4 different serotypes of dengue fever, recovery from one serotype usually results in lifelong immunity. However, recurrent infections of dengue fever is usually more severe with different serotypes. As it can cause massive internal bleeding in patients presenting with fevers, myalgia and joint pains. Checking for bacterial and viral infections are crucial. Dengue fever should always be on top of the list if patients have traveled to an endemic area. Even if patients have had dengue before, recurrent dengue fever infections are rare, but can happen in the case as we presented.



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