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Case Report

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Haemospermia due to Dengue fever – Case Report of an Atypical Presentation of Dengue

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Abstract

Dengue is a mosquito borne viral disease common in regions with tropical climates. To date, it is estimated that >55% of the population worldwide is exposed to dengue virus (DENV), an RNA virus from the genus Flavi virus of the Flaviviridae family. Most dengue-infected persons are asymptomatic or develop a mild form of the disease with common signs and symptoms resembling those of influenza, such as fever, retroocular pain, headache, rash, muscle and joint pain, nausea, vomiting, and fatigue. However, a small proportion of infections progress to severe illness that can cause rapid onset of capillary leakage leading to bleeding, thrombocytopenia, and rapid shock. Dengue Haemorrhagic Fever (DHF) has diverse manifestations ranging from petechial skin haemorrhages to life threatening gum , gastrointestinal ,cerebral, pulmonary haemorrhag and haematuria. However, haemospermia with DHF is not well documented in literature. We report a rare case of haemospermia due to Dengue.

Introduction:

Dengue is a mosquito borne viral disease common in regions with tropical climates. It is estimated that >55% of the population worldwide is exposed to dengue virus (DENV), an RNA virus from the genus Flavivirus of the Flaviviridae family[1]. .The disease affects people of all ages from infancy through to adulthood.The early signs of the disease are non-specific. According to the WHO classification (2009), DF is characterized by febrile episode (≥40 °C for 2–7 days) frequently associated with rash, nausea, vomiting, and headache. The persistence of the aforementioned symptoms and appearance of other symptoms, such as abdominal pain, mucosal bleed, and lethargy and restlessness can be seen 3–7 days later. Laboratory analysis of mild dengue fever cases usually shows abnormal leukocyte counts and moderate elevation of the hepatic amino-transferase enzyme activity[2]. The emergence of these symptoms is a warning sign for disease progression to severe form (DHF/DSS) if therapeutic intervention is not undertaken. At this stage clinical intervention and continuous surveillance are imperative to prevent vascular leakage, especially in an endemic area. However, a small proportion of infections progress to severe illness that can cause rapid onset of thrombocytopenia and capillary leakage leading petechiae, or bleeding from the nose or gums, gastrointestinal bleeding, haematuria and rapid shock [3].

Case report: A male patient of 53 years presented with haemospermia for last 1 day with mild obstructed

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LUTS with no history of dysuria and fever. Patient was diabetic and hypertensive, both are well controlled with drugs. No significant drug history especially anticoagulant and family history of haemospermia. Semen analysis showed RBC with no growth of organism. Urine RME showed 1-2 pus cell, RBC nil and CS showed no growth. Patients had mild leucocytosis, platelet count less than 80000 with normal PSA. USG showed prostate enlarged with weight about 50 gram. Uroflometry showed obstructed variety of urine flow. On next day patient developed high fever 103^0F, nausea, headech with bleeding from oral and nasal cavities and per rectal bleeding with petechiae. At this time NS1 and IgM for Dengue was positive. Total Leucocyte Count (TLC)-4500/cumm, Differential Leucocyte Count (DLC)-80% polymorphs, 15% lymphocytes, 3% monocytes and 2% eosinophils; platelet count of 50,000/cumm with Hemoglobin (Hb)-7.5 gm%. Next day platelet count of 20,000/cumm, serum bilirubin-1.6mg%; SGOT/SGPT were 95/90 IU; serum alkaline phosphatase-132 IU; serum proteins-4.9gm%; serum creatinine-1.1mg%a Prothrombin time and International Normalized Ratio (INR)-1.Second Ultrasound showed liver of size 17.2cm with fatty infiltration, gallbladder slightly oedematous whereas, size of spleen, kidneys and pancreas was within normal limits, Prostate was enlarged. Patient was treated symptomatically with intravenous fluids, fresh blood transfusion including platelet transfusions and anti-pyretics and other supportive measures. Patients general condition improved and he became afebrile. During haemohhagic phage patient was treated by internist. His symptoms and platelet count slowly improved to normal in a week. He was discharged in stable condition with advice to follow-up. His thrombophilia profile and semen analysis done after 6 weeks of discharge from the hospital was reported normal.

Discussion:

Dengue fever is a major cause of illness and death worldwide. The disease represents a global health issue as it is endemic in around 100 countries, most of which are in tropical and sub-tropical areas. Data from the World Health Organization (WHO) estimates up to 100 million cases of dengue fever each year. However, a recent published work by Bhatt et al. (2013) suggested that the burden of dengue is far more than the WHO estimation and indicated that 390 million infections of dengue virus could have happened every year [4]. Based on the results from several studies, the WHO has launched a new dengue classification. This classification divides dengue cases into a) cases with/without warning signs and b) severe dengue case [5]. Clinically, dengue infection has a broad spectrum of features. The vast majority of cases are asymptomatic and passes unnoticed. Typically, the symptoms start to be prominent after an incubation period of 3–10 days [6]. The severity of the clinical manifestations varies from mild symptoms to severe life threatening symptoms in the case of dengue hemorrhagic fever (DHF) and dengue shock syndrome (DSS).Predicting the progression of the mild signs to a severe DHF/DSS remains a challenge due to non-specificity of clinical presentation and the incomplete understanding of pathophysiology of the disease and its underlying molecular mechanisms. In early stage as symptoms are nonspecific so it was very difficult to diagnosed dengue fever. In addition hemorrhagic manifestation usually not early presenting feature. But our patient presented with haemospermia and next day developed high fever with nausea and headech with bleeding menifestatation subsequently. So patient presented with haemospermia might be due to Dengue fever very unlikely and thinking possibly due to Prostatitis or seminal Vesiculitis or Prostatic cancer. At this time all investigations were normal only Platelet count was less. But on next day when patient developed high fever and different bleeding manifestation and skin rash then consultation taken from Internist and advised for NS1 and Serological test IgM ,all were positive. At that time diagnosis was established as Dengue fever and advised other investigations to monitor the disease stage and severity. Subsequently patient developed gum, nasal, per rectal bleeding, petechiae. So it was assume to us haemospermia was a presentation of dengue fever in this patients. Review of different literatures showed no article or case report to showed haemospermia due to dengue fever or it may be early presentating feature .Henry M and Weybauch et al showed haemospermia may developed as urogenital complications of Dengue fever. They conducted a study on 141 male of United States Navy and found 3.5% patients experienced bloody seminal emissions, the findings confirmed by laboratory examinations of spermatic fluid.

At early stage of Dengue patient might have no symotoms or sometimes one or more symptoms like petechiae haemorrhage, gum or GI bleeding may have. Very rarely patient might have haemospermia like our patients. These bleeding menifestation sometimes

warning sign of severe dnegue or dengue shock syndrome.

Conclusion:

Although haemospermia are commonly occur due to bacterial infection of prostate or Seminal vesiculitis and prostatic malignancy. Sometimes may occur due to viral infection ,very rarely due to Dengue. So Dengue should kept in mind during management of haemospermia especially during endemic or pandemic situation.

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