



# A Case Study Of Dengue Fever

School of Allied Health sciences,

Datta Meghe Institute of higher education and research center

(Deemed to be University) Maharashtra, India

## Abstract

### Introduction:

The most prevalent viral disease spread by arthropods is dengue fever . It causes sickness , high temperature, headache, arthralgia, myalgia, and rashes. In some critical situation, Dengue hemorrhagic fever (DHF) should also cause . The dengue shock syndrome would also been seen in this .

**Clinical Findings:** Swelling on hands and lips, Fever is upto 102°F, Nasal Bleeding.

**Diagnostic Evaluation:** A tentative It was determined that the patient had viral hemorrhagic fever since this patient had a Hepatosplenomegaly, high-grade fever, subconjunctival haemorrhage, nasal haemorrhage. Malaria, viral hepatitis, and leptospirosis were among the main differentials.

**Therapeutic Intervention:** Ceftriaxone 2gm OD for 14 days, Fluconazole 200mg orally OD, normal saline, paracetamol, inj. Gravinate was given to the patient .

**Outcome:** His temperature had reduced, and he also have edema on his hands and foots .However, he continued to experience pain in his lower limbs and at the time of discharge he got paralysis .

**Conclusion:** At medicine ward the patient was admitted in AVBRH hospital with a diagnosis of Dengue Fever and he had complaint of fever, nasal bleeding , pain in legs. After the proper treatment the condition of the patient was improved .

**Keywords:** Dengue Fever , infection .

## Introduction

Mosquito borne infection is the arbo-viral disease. Symptoms of dengue are fever, myalgia, arthralgia, rash and so on.

It mostly causes muscle pain. It's spread by the Aedes mosquito, which can be found in tropical and subtropical places. Dengue fever has become much more common. Dengue fever are mostly depend on the season. Dengue fever cases are at their peak in between July and September, because during rainfall the breeding of the Aedes mosquito take place.

One of four serotypes of the single-stranded RNA Flavivirus genus causes dengue illness (DENV 1-4).<sup>5</sup> When you are infected with one serotype, You are immune to that serotype indefinitely, but you are not immune to others. It has a less than 1% case fatality rate. In severe dengue the vascular leakage, and hypotension may also occur.

**Patient Identification:** The 32 year of male from Shirasgaon admitted to Medicine Ward, AVBRH on 14 July 2022 with a known case of a Dengue Fever. At the time of admission his weight was 56kg and height was 158cm.

**Present Medical History:** A 32 year male came to AVBRH hospital on 14 July 2022 with his wife with a complaint of pain in leg and lips, fever and nasal bleeding and he was admitted to Medicine Ward. He is a known case of Dengue Fever and his platelets count at the time of admission was  $137 \times 10^9/L$ . The patient is weak and inactive on admission.

**Family History:** There are four members in the family of my patient. He was diagnosed with Dengue Fever. Family members do not have any related issues except the patient who was admitted in the hospital.

**Clinical Findings:** pain in leg and lips, Fever (Temperature- $102^\circ F$ ), Nasal Bleeding, platelets  $137-10^9/L$ .

**Etiology:** Dengue is the most common viral disease which is transmitted by arthropods and it may also caused severe muscle aches. Symptoms of this are rash, myalgia, arthralgia, vascular leakage, headache and fever. In some severe cases DHF may also seen.

**Physical Evaluation:** A patient was looked ill and he was conscious of person, place and time. The BP of the patient was 120/70 mm Hg, the rate of respiration was 15 breaths per minute, and the pulse rate are 80 beats per min. Patient was febrile ( $101^\circ F$ ), anaemic, and also suffered from jaundiced, with little edoema on his hands and legs, slightly swollen lips.

The abdomen was soft, and non tender. CVS – S1 and S2 +, pallor was present, no clubbing, no cyanosis was there.

**Diagnostic Assessment:** The leukoerythroblastic image was seen on a peripheral CBC smear. Anisocytosis, poikilocytosis, polychromasia, macrocytes, nucleated RBC, myelocytes, and metamyelocytes, as well as platelet clumping, were all observed. The patient had a urinary tract infectio but no organism grew in culture tests.

**Therapeutic Intervention:** Ceftriaxone 2gm OD for 14 days, Fluconazole 200mg per oral for OD 0.9% normal saline, paracetamol, inj. Gravinate [dimenhydrinate] was given to the patient.

**Discussion:**

The full blood picture revealed an elevated total leukocyte count (TLC) of 25.1 (neutrophils 40%, lymphocytes 57%), and a positive *Candida tropicalis* blood culture. Some bacteria are also involved in that are: *E. coli*, *Salmonella* species, *Shigella* species, *Klebsiella* species, *Enterococcus faecalis*, *Moraxella lacunata*, *Staphylococcus aureus*, *Haemophilus influenzae*, *Candida tropicalis*, *Mycobacterium tuberculosis*, *Mycoplasma*, can all cause bacteremia in dengue patients. On the skin and intestines the fungus *Candida tropicalis* is found. Mucosal damage has been also found. Because of the sensitivity of the mucosa of the intestine, Dengue fever is a virus-borne illness in which organisms can enter the bloodstream.

Our patient was unable to do movements of his lower limbs. Anticoagulation/antiplatelet therapy is used in those who are on it, or those who have a bleeding disorder haemophilia, iliopsoas hematoma is mainly induced by trauma. Tallroth was the first to describe the incidence of spontaneous iliopsoas muscle bleeding followed by a femoral nerve damage in a haemophilia patient in 1939. Dengue fever can cause muscle hematomas, which are a rare consequence. Only a few examples of muscle hematomas that occur spontaneously in DHF have been documented in the literature.

**Reference:**

1. T. J. Schaefer, P. K. Panda, and R. W. Wolford, *Dengue Fever*, StatPearls, StatPearls Publishing, Treasure Island, FL, USA, 2019, <http://www.ncbi.nlm.nih.gov/pubmed/28613483>.
2. O. J. Brady, P. W. Gething, S. Bhatt et al., "Refining the global spatial limits of dengue virus transmission by evidence-based consensus," *PLoS Neglected Tropical Diseases*, vol. 6, no. 8, Article ID e1760, 2012.
3. View at: [Publisher Site](#) | [Google Scholar](#)
4. J. Khan, I. Khan, and I. Amin, "A comprehensive entomological, serological and molecular study of 2013 dengue outbreak of Swat, Khyber Pakhtunkhwa, Pakistan," *PLoS One*, vol. 11, no. 2, Article ID e0147416, 2016.
5. View at: [Publisher Site](#) | [Google Scholar](#)
6. WHO, *Dengue Fever–Pakistan*, WHO, Geneva, Switzerland, 2019, <https://www.who.int/csr/don/19-november-2019-dengue-pakistan/en/>.
7. I.-K. Lee, J.-W. Liu, and K. D. Yang, "Clinical characteristics and risk factors for concurrent bacteremia in adults with dengue hemorrhagic fever," *The American Journal of Tropical Medicine and Hygiene*, vol. 72, no. 2, pp. 221–226, 2005. View at: [Publisher Site](#) | [Google Scholar](#)
8. S. Suzukil, T. Kitazawa, Y. Ota et al., "Dengue hemorrhagic shock and disseminated candidiasis," *Internal Medicine*, vol. 46, no. 13, pp. 1043–1046, 2007. View at: [Publisher Site](#) | [Google Scholar](#)
9. W. C. Butterfield, R. J. Neviasser, and M. P. Roberts, "Femoral neuropathy and anticoagulants," *Annals of Surgery*, vol. 176, no. 1, pp. 58–61, 1972. View at: [Publisher Site](#) | [Google Scholar](#)
10. A. M. Ameer, W. K. Arachchi, and P. A. Jayasingha, "Psoas haematoma complicating dengue haemorrhagic fever: a case report," *Galle Medical Journal*, vol. 14, no. 1, p. 83, 2009. View at: [Publisher Site](#) | [Google Scholar](#)