

Dengue Fever Associated With Nephrotic Syndrome



Medicine

KEYWORDS :

Dr. Shameem Mohd (3rd Year Resident)

Dr. Bhakti Gajjar (3rd Year Resident)

Dr. Rinkesh Panchal (1st Year Resident)

Introduction

Dengue fever is vector borne disease, spread by Aedes Aegypti mosquito cause by a RNA virus called Dengue virus from Flavivirus genre. Dengue Hemorrhagic and Dengue Shock Syndrome are the severe forms of Dengue infection. Dengue fever is acute febrile illness accompanied by constitutional symptoms. Dengue fever associated with variety of kidney disease. Proteinuria found in 74% of patients with severe dengue infection. Acute Renal Failure complicate severe dengue in 2.5% of cases and carries high mortality rates.

Case Presentation

A 12 year old hindu girl named Risha coming from kankaria area Ahmedabad from medium economical status with chief complains of fever with chills and rigors since 5 days and facial edema since 4 days. Patient was relatively asymptomatic before 5 days the she developed fever- high grade , continuous, not relived by medication associated with chills and rigors, on second day patient started to develop facial oedema, then patient brought to V.S. hospital, and got admitted, Patient had no complains of cough-cold, diarrhea, vomiting, burning micturition, hematuria, pedal oedema. There was no past history of bleeding disorders, tuberculosis, hypertension, any surgery or trauma. On general examination the vitals were-Temperature-98.6 f, pulse-88/min with normal rate rhythm and tension in right radial artery, respiratory rate-18/min, blood pressure 100/70mmHg in right arm. On systemic examination bilateral airway entry present with clear chest, S1,S2 were present, per abdomen was soft without tenderness, patient was fully conscious and oriented to time place and person. In hospital patient was investigated for pyrexia. Laboratory investigations were- Hb-5.65mg/dl, Total WBC count-15000, Platelet count-16000 with MCV-72.2,MCH-23.4, MCHC-32.4, RDW-10.6. On Serum Investigation RBS 80, Urea-49, Creatinine-0.82, potassium-4.9, sodium-129, Bilirubin Total-1.20, Direct-0.6, ALT-2046, Alkaline phosphate-93, Total Protein-4.86, albumin 2.60, Dengue NS1 antigen-Negative, Dengue IgM- Positive, Prothrombin time-10.8, activated partial thromboplastin time-39.5 , INR-0.92, Bleeding Time- 2 min 50 sec, Clotting Time-5 min 30 sec. On Urine Examination Albumin was present with puss cell 2-3/HPF, Epithelial cell 1-2/HPF, rest were normal on Urine routine micro examination. Patient's viral markers including HIV, HbsAg, HCV, HEV, HAV, were Non Reactive, USG of abdomen and pelvis was normal. Random Urinary Albumin-8544mg/L, Random Urinary Creatinine-148.31mg/dl, Urinary Albumin/Creatinine Ratio-5761.2microgram/mg Creatinine suggestive of clinical albuminuria or macroalbuminuria. After proper History taking and related investigations diagnosis of Dengue Fever associated with Nephrotic Syndrome. For confirmation of Nephrotic Syndrome, Renal Biopsy was done which showed Mild Mesangial Hypercellularity. In view of Nephrotic Syndrome Minimal Change Disease was favoured.

Patient was treated with Fluid, Diuretics and supportive treatment. Gradually her platelet count increased with infusion of 4 pint of PRC, and after week on Discharge patients platelet count were 2,95,000 and Urinary ACR decreased up to 1369 microgram/mg of Creatinine.