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Research Article

**CONSEQUENCES OF DENGUE FEVER AND CLINICAL
PRESENTATION OF PATIENTS IN NISHTER HOSPITAL
MULTAN**¹Dr. Muhammad Wasim Khan, ²Dr. Masooma Zafar, ³Dr. Muhammad Haris Qureshi¹M.O BHU Jhugi Wala. Jatoi. Muzaffargarh²THQ Hospital Chak Jhumra³M.O BHU Litra, Tehsil Taunsa Shareef, DG khan**ABSTRACT**

The dengue fever is an important international health problem dominated by tropical and subtropical countries.

Objective: *The aim of this study is to examine the clinical findings, trends and outcomes of all dengue cases admitted to Nishter Hospital, Multan.*

Study Design: *A Prospective study*

Place and Duration: *The study was done in the Medical Department of Nishter Hospital for the period of one Year from June 2015 to June 2016.*

Materials and Methods: *100 patients were included in the study. The majority were male, 54 (54%) and 61% in the 16-40 age group. The most common symptom was fever (100%), headache (90%), myalgia (81%), vomiting (56%) and abdominal pain (48%). The most common hemorrhagic findings were 21% petioles. 22% had dengue hemorrhagic fever, and dengue syndrome occurs in 16%. The observed complications were hepatic dysfunction in 34%, renal insufficiency in 26%, multiorgan failure in 18%, encephalopathy in 12% and ARDS in 12%. 11% was mortality rate.*

Conclusion: *The one of the main causes of undifferentiated fever is Dengue. It occurs as a very nonspecific disease and by primary care physicians is not considered a clinical entity.*

Key words: *Dengue fever syndrome, dengue haemorrhagic fever, dengue fever.*

Corresponding author:**Dr. Muhammad Wasim Khan,**

M.O,

BHU Jhugi Wala. Jatoi.

Muzaffargarh

QR code



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INTRODUCTION:

In our country dengue infection is an important problem to health. Worldwide, the dengue incidence flare has rise in past few years. The World Health Organization (WHO) now concludes that around one in the population of world is at risk of developing this dengue infection. In 1780 Benjamin Rush reported Dengue first described it as "broken bones fever". Four serotyped infectious viral infections caused by mosquitoes, dengue hemorrhagic fever (DHF) dengue fever (DF), and dengue shock syndrome (DSS). It is noted that around 25 million people worldwide are still at infection risk and in 100 endemic countries 24 thousands deaths occur. The Death rate is 20% in untreated patients, while the mortality risk in treated DHF / SCD cases is 1%. Pakistan is among the seven regions in the Southeast Asia region and regularly reports on the frequency with which the DF / DHF epidemics are constantly threatening the system of health. The first approved report on dengue fever infection in Pakistan dates back to the 1940s, and since then, more states have been reporting on the disease, which attacks epidemic proportions that frequently secrete large morbidity and mortality. There are several deadly forms of DHF, DSS reported in Pakistan from time to time in Punjab. The four serotypes of the virus are circulating and documented in the Multan region. In all these epidemics, infections in active adults aged 16-60 years. Common signs and Observed symptoms are headache, fever, arthralgia, muscle aches and bleeding. The precise clinical picture is important for management of patient and is therefore important for life savings. This study is an effort to identify the major clinical and laboratory investigations of confirmed confirmed cases serologically in the hospital during the study period. The adult population represent the working group.

MATERIALS AND METHODS:

This study was conducted as a prospective descriptive study based on the hospital based data collection. Through a questionnaire data was collected that was based and developed on the literature review . Hundreds of patients were selected for this study with a dangling fire in a tertiary hospital for a period of one year from June 2015 to June 2016 in Nishter Hospital, Multan. NS1 antigen and dengue positive IgG antibodies. These patients presented with myalgia, fever, vomiting, headache, bleeding and abdominal pain. The NS1 antigen and the IgM anti-mutant were estimated using capture ELISA. Dangling fever, dengue shock syndrome and dengue hemorrhagic fever are all relied on WHO criteria. Patients with dengue fever, a febrile ELISA test, who had only body aches, colds, rash, headache,

bleeding and thrombocytopenia were selected for the study. Patients with enteric fever and malaria were not selected for the study. clinical reviews and Detailed history were made. Liver function tests, CBC, x-ray chest, renal function tests and abdominal USG was performed.

RESULTS:

100 of total cases hospitalized between June 2015 and June 2016 were analyzed statistically. From June to September, most of the dengue cases showed the role of the seasonal rainfall in the group. In most cases, men were 54% and women were 46%. As seen in Table 1, In the 15-40 age group the maximum number of cases were up to 61%.

Table 1: Age characteristics of patients with Dengue fever

Age (Years)	Male (N=54)	Female (N=46)	Total (100)
16-20	10	7	17
21-30	16	9	25
31-40	9	10	19
41-50	8	8	16
51-60	6	9	15
>60	5	3	8

The average length of hospitalization is 7 to 12 days. As seen in Table 2, in all cases fever persists and the symptom most common was myalgia (81%), abdominal pain (48%), vomiting (56%) dyspnea 25%, altered sensory (13%) and rash (21%). Hemorrhagic findings (21%) are ecchymosis, petechiae, hematuria, hemorrhage, hematemesis, malena and bleeding from nose. In the study, the most common complication of 52 patients was found as 34% is liver dysfunction, multiple organ failure 18%, renal failure 26%, ARDS 12% and encephalopathy 13%. Reported deaths were 11%.

Table 2: Symptoms and complications of dengue fever

Symptoms	Patients (N=100)
Fever	100
Headache	90
Myalgia	81
Vomiting	56
Abdomen pain	48
Breathlessness	25
Skin rash	20
Bleeding tendency	18
Complications	
Hepatic dysfunction	34
Renal failure	27
Multi organ failure	14
Encephalopathy	13
ARDS	12

DISCUSSION:

In this research laboratory characteristics, Clinical profile and DF / DSS results in young patients. Dengue is a common tropical and subtropical regions disease. First confirmed case in Pakistan, in the 1980s, reports from other regions were published from other states. The description relates to clinical features, but can be presented in a variety of manifestations.

There has been a steady increase in dengue patients number in recent years. This is due to unplanned activities of construction and rapid urbanization with poor sanitation facilities contributing to the fertility of mosquitoes. The increased awareness between first epidemic and medical fraternity and the diagnostic tools availability in the hospital have granted to better detection of cases.

During the seven years of the work, since September, since September, there has been a gradual increase in the cases. After some parts of the premonzónica rains, which facilitated the multiplication of the vectors, there was an increase in cases before the time of the wake in April and May, depending on the water stagnation. These findings emphasize that precautionary dengue infection measures should be taken after the first rainfall season and at the end of the aiseon during the water recession periods. The M:F relationship was 1.02: 1. A consistent model was also observed in the analysis of the Dengue epidemic in South Punjab in 2006 retrospectively. The study proved that the most of cases were 15-40 of age. Dengue clinical picture explore that common symptom in dengue is fever (100%). In Pakistan Similar studies and its surroundings confirmed that fever is the frequent symptom. Due to liver damage caused by dengue virus abdominal pain and vomiting was common presentation. In Pakistan, other infections causing gastrointestinal symptoms such as typhoid fever, enterovirus infections and high temperature are frequent and mostly delay dengue diagnosis. Itered sensorium (58%), hepatomegaly (97.4%), rash (42%) and cough (38%) have been reported in a special study of dengue shock syndrome in 2013 in Lahore. Headache was also less common than other studies. This is also documented in our work. In some of our patients, retroorbital pain, a cardinal feature of dangenin, was observed. While the majority of patients were admitted with dengue hemorrhagic fever, dengue fever and dengue shock syndrome were a minimum. In rural areas same findings were noted.

Hemorrhagic findings (21%) are ecchymosis, petechiae, hematuria, hemorrhage, hematemesis, malena and bleeding. In the study, the most common complication of 52 patients were 26% renal failure,

encephalopathy 13% and 12% ARDS. Reported deaths were 11%.

CONCLUSION:

This study supports new studies on the application of intervention measures to improve diagnostic accuracy and accuracy at the primary care level in dengue endemic regions. This study emphasizes the importance of physicians in their areas of manifestations, epidemiology, dengue consequences and complications of disease.

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