

Study of clinical profile of dengue patients admitted in a tertiary care center of Mohali

Rajesh Chauhan, Neha Agarwal

(Department of Medicine, Grecian Super Specialty Hospital, India)

Corresponding author: Neha Agarwal

Abstract: Dengue fever is still in evolution and involving newer areas in India and newer population. In view of broad spectrum of clinical presentation and complications of the disease dengue viral infection still remains a challenge for the physician.

Keywords: Dengue fever (DF)

Date of Submission: 13-12-2018

Date of acceptance: 28-12-2018

I. Introduction

Dengue fever is a major international health problem with distribution in tropical countries and caused by arbovirus of genus flavivirus whose vector is mosquito *Aedes aegypti* [1-3]. Its distribution in India is majorly in Delhi, West Bengal, nearly whole South India followed by Rajasthan, Gujarat and Haryana [4]. DF presents as fatigue, generalized weakness, fever, headache, myalgia and backache [5]. Diagnosis can be made by IgMELISA or paired serology during recovery or by antigen detection ELISA or RT-PCR during acute phase. There is no specific therapy of management of DF besides supportive care [6].

II. Methods

2.1. Sample and data collection

Fifty consecutive patients seropositive for dengue were enrolled from OPD/IPD of Grecian Super Specialty Hospital between August 2018 to November 2018. A database was created, and it consisted of the following: (a) Name, age, gender (b) Presenting symptoms (c) Laboratory parameters

2.2 Case inclusion criteria

Patients positive for Dengue serology (either NS1 antigen or IgM antibody) were enrolled in study after informed consent.

2.3 Study procedure

All the data of dengue serology positive patients (total 50 patients) was collected and tabulated. Information regarding demography (age, gender, socio – economic status), signs and symptoms, and laboratory parameters was collected and recorded in case record form and then analyzed.

III. Results

Out of 50 Dengue patients 12% patients were from age group 18 – 30 years, 34% patients were from age group 31 – 40 years, 34% patients were from age group 41 – 50 years, and 20% patients were from age group 51 – 60 yrs. (Table 1)

Out of 50 patients 20 were males and 30 were females. Out of 50 patients 100% patients presented with fever, 80% with headache, 80% with myalgia, 46% with conjunctival congestion, 46% with retro – orbital pain, 20% with skin rashes, 10% with abdominal pain, 10% with nausea and vomiting, 12% with diarrhea and 20% with other symptoms like altered sensorium. (Table 2)

Among laboratory parameters 90% patients had thrombocytopenia, 46% had leucopenia, 70% had elevated SGPT and 60% had elevated SGOT, 10% patients had abnormal bilirubin while 30% had raised hematocrit. (Table 3)

IV. Figures and Tables

Table 1: Distribution of the patients according to age and gender

Age (years)	Male	Female	Total
18-30	2	4	6(12%)
31-40	6	11	17(34%)

41-50	7	10	17(34%)
51-60	5	5	10(20%)
Total	20	30	50(100%)

Table 2: Distribution of patients according to presenting symptoms

Symptoms	N	%
Fever	50	100
Headache	40	80
Myalgia	40	80
Retro-orbital pain	23	46
Conjunctival Congestion	23	46
Skin Rashes	10	20
Diarrhoea	6	12
Abdominal Pain	5	10
Nausea and Vomiting	5	10
Others	10	20

Table 3: Laboratory Parameters

Laboratory Parameters	N	%
Thrombocytopenia(<50000/cumm)	45	90
Leucopenia(<4000/cumm)	23	46
SGPT(>55 IU/L)	35	70
SGOT(>45 IU/L)	30	60
S. Total Bilirubin >2 mg/dl	5	10
Raised Hematocrit(>45%)	15	30

V. Discussion

In our study patients with DF typically presented with fever, frontal headache, retro orbital pain, severe myalgia(5). fever was most common presenting complain and was present in all patients. Similar studies in and around India have also substantiated fever as being the most common presenting symptom.

In our study percentage of patients with gastro intestinal symptoms and with skin rashes were in concordance with other studies [7].

Our study revealed that majority of patients were comprised of age group 31 – 50 years and more patients were female which is different from previous studies done [7] in which majority of patients were between age group 18 – 39 years and were males.

Liver enzyme elevation and thrombocytopenia which is the main feature of the patients in our study was in accordance with previous studies [8].

VI. Conclusion

Our study has revealed varied clinical profile of DF which is also of diagnostic value, symptoms were usually typical as per other clinical studies but few atypical features were also seen. Continuous surveillance and timely intervention are needed to timely identify cases and minimize mortality.

References

- [1]. Vaidya R. *Ischaemic Heart Disease* (IHD). In: Bhalwar R, Vaidya R, Tilak R, Gupta R, Kunte R. Text Book of Public Health and Community Medicine. 1st ed. New Delhi: Department of Community Medicine, AFMC, Pune; 2009: 1040–3.
- [2]. World Health Organization. Special Programme for Research and Training in Tropical Diseases. Report of the Scientific Working Group on Dengue, 2006. Geneva. October 2006.
- [3]. Dengue. Centers for Disease Control and Prevention. <https://www.cdc.gov/dengue/> Accessed on 1 July 2016.
- [4]. National Vector Borne Disease Control Programme. Annual Report 2014-15. Ministry of Health and Family Welfare. Government of India. <http://nvbdcp.gov.in/doc/annual-report-nvbdcp-2014-15.pdf> Accessed on 1 July 2016.
- [5]. Kuhn JH, Peters CJ. *Arthropod-borne and rodent-borne virusinfections*. In: Kasper DL, Fauci AS, Hauser SL, Longo DL, Jameson JL, Loscalzo J, editors. Harrison's Principles of Internal Medicine. 19th ed. Volume 2. McGraw-Hill Education; Columbus, OH, USA: 2015. pp. 1304–23.
- [6]. Kelly JD, Shandera WX. *Viral and Rickettsial Infections*. In: Papadakis MA, McPhee SJ, Rabow MW, editors. 2016: Current Medical Diagnosis and Treatment. 55th ed. McGraw-Hill Education; New York: 2016. pp. 1342-416.
- [7]. Kashinkunti MD, Shiddappa, Dhananjaya M. A study of clinical profile of dengue fever in a tertiary care teaching hospital. *Sch J App Med Sci* 2013; 1(4):280–2.
- [8]. Karoli R, Fatima J, Siddiqi Z, Kazmi KI, Sultania AR. Clinical profile of dengue infection at a teaching hospital in North India. *J Infect Dev Ctries* 2012; 6(7):551–4.

Neha Agarwal. "Study of clinical profile of dengue patients admitted in a tertiary care center of Mohali". IOSR Journal of Dental and Medical Sciences (IOSR-JDMS), vol. 17, no. 12, 2018, pp 18-19.