

The Clinical Profile of Dengue Patients in Children

Dr Jatin Nagal¹, Dr Sanjay Kumar Rathi²

¹Junior Specialist Pediatrics, District Hospital Sri Ganganagar

²Junior Specialist Pediatrics, District Hospital Sri Ganganagar

Article Info: Received 17 January 2022; Accepted 22 March 2022

doi: <https://doi.org/10.32553/ijmbs.v6i3.2482>

Corresponding author: Dr Sanjay Kumar Rathi

Conflict of interest: No conflict of interest.

Abstract

Background: Dengue has become a global public health concern, especially in most tropical and subtropical countries. To study the clinical profile of dengue in children.

Methods: The hospital based study was conducted on patients presenting to paediatric hospital, who fulfilled inclusion and exclusion criteria.

Results: Based on the symptoms, the most common symptoms noticed were fever 92.00% followed by myalgia 84.00% decreased appetite 80.00%, retro orbital pain in 82.0% and vomiting 78.00%

Conclusion: It concluded that common symptoms observed were fever, myalgia, decreased appetite and headache

Keywords: Dengue, Fever, Vomiting

Introduction

Dengue is the most rapidly spreading mosquito-borne viral disease in the world. In the last 50 years, incidence has increased 30-fold with increasing geographic expansion to new countries and in the present decade, from urban to rural settings. An estimated 50 million dengue infections occur annually and approximately 2.5 billion people live in dengue endemic countries.¹

In India, there is increased proportion of Dengue cases with severe disease. The dengue epidemics in India are cyclical and are more frequent, expanding geographically into the rural areas and all forms of serotypes are circulating in the community. Uncontrolled population growth, urbanization, inadequate waste water management, and lack of effective mosquito control have been implicated in the increased

distribution and density of the vector and also the increased spread of the virus. The manifestation of dengue fever vary from asymptomatic to severe dengue fever and differ from epidemic to epidemic with atypical manifestation. Early recognition of severe dengue infection and proper treatment is very important to reduce the morbidity and mortality. WHO revised their guidelines in 2009 and accordingly the clinical classification was revised as dengue without warning signs, dengue with warning signs, and severe dengue which was more appropriate and much easier to understand. It also helped in identifying sick dengue patients easier for the clinicians than the traditional guidelines.²

Material and Methods

Hospital-based cross-sectional study.

Inclusion criteria

- Children with age group of 0-18 years. Admitted with symptoms of dengue fever based on WHO criteria. NS1 antigen and IgM dengue antibody positive, cases by ELISA technique.

Exclusion criteria

- Children with IgG dengue antibody positive.

- Children with enteric fever and malaria

Data Analysis :

- Data was recorded as per Performa. The data analysis was computer based; SPSS-22 was used for analysis. For categoric variables chi-square test was used. For continuous variables independent samples's *t*-test was used. *P*-value <0.05 was considered as significant.

Observations

Table 1: Distribution of Cases According to Age Group (years)

Variable	Dengue Positive(n=100)
Age	10.32±4.21
Male : Female	65 : 35

Mean age was 10.32±4.21 year in dengue positive cases. Out of 100 cases 65 cases were male

Table 2: Clinical profile

Clinical profile	No of cases	Percentage
Fever	92	92.00
Myalgia	84	84.00
Retroorbital pain	82	82.00
Decreased appetite	80	80.00
Vomiting	78	78.00
Headache	74	74.00
Pain abdomen	68	68.00
Abdominal distension	63	63.00

Based on the symptoms, the most common symptoms noticed were fever 92.00% followed by myalgia 84.00% decreased appetite 80.00%, retroorbital pain in 82.0% and vomiting 78.00%

Discussion

Dengue is a major international health concern that is prevalent in tropical and sub-tropical countries. Since the first confirmed case of dengue in India, during the 1940s, intermittent reports from Delhi, Ludhiana, Mangalore, Vellore and from other states have been

published. The diagnosis is by clinical profile but they can present with varied manifestation^{3,4}.

There is a steady increase in the outbreak of dengue fever over the years and so among children. This is due to the rapid urbanization with unplanned construction activities and poor sanitation facilities contributing fertile breeding grounds for mosquitoes. Due to an increase in the awareness among health care professionals following the initial epidemic and the availability of diagnostic tests have contributed to the increased diagnosis⁵.

An outbreak of dengue fever during pre-monsoon and monsoon season reported due to stagnation of water after bouts of rainfall which facilitate vector breeding. This highlight the preventive measures against dengue fever should be taken during water stagnation periods after the initial bouts of rainfall and at the end of monsoon.

Conclusion

It concluded that common symptoms observed were fever, myalgia, decreased appetite and headache

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