



A CLINICO LABORATORY PROFILE OF ACUTE FEBRILE ILLNESS IN A TERTIARY CARE HOSPITAL IN SOUTH INDIA

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ABSTRACT

Background: The objective of this study was to describe the clinico-laboratory profile of acute febrile illnesses among inpatients in a tertiary care hospital.

Methods: The study is a prospective, observational study conducted in a tertiary care hospital in Nellore, India. Between July 2017 to January 2018, adult patients admitted to the hospital with acute febrile illness were included. Demographic, clinical and laboratory data were collected and analyzed for each patient.

Results: Out of 300 patients enrolled females were 189(63%), males were 111(37%). Study group included patients of ages 18 to 60 years of which house wives were 110(36.6%), agricultural labourers were 65(21.6%), daily wage workers were 47(15.6%), students were 44(14.6%), office employees were 34(11.3%).

Dengue was diagnosed in 90/300(30%). Malaria was diagnosed in 30/300(10%). Pneumonia was diagnosed in 30/300(10%). Typhoid was found in 8/300(2.6%). Scrub typhus was diagnosed in 5/300(1.6%). Leptospira was diagnosed in 3/300(1%).

The most common symptoms reported amongst the enrolled patients included generalized body ache (80%), headache (70.8%), abdominal pain (65.2%), vomiting (63.4%), cough (40.4%), and breathlessness (36.9%), loose motion (20.6%) and bleeding manifestations (8.8%).

Conclusion: The similarity in clinical presentation and diversity of etiological agents demonstrates the complexity of diagnosis and treatment of acute febrile illness. This study of clinico-laboratory profile of acute febrile illness will be helpful to reduce mortality by early diagnosis and prompt treatment.

KEYWORDS :

INTRODUCTION

Acute Febrile Illness(AFI) accounts for the majority of outpatient visits and inpatient admissions in India. The causes are variable and need a systematic approach to identify the cause of appropriate therapy. AFI can be potentially fatal if the aetiology is not recognised and if not appropriately treated early. Hence, this study was done to describe the distribution of aetiological agents of AFI in patients who got admitted in our hospital due to AFI and to define disease-specific clinical profiles based on their haematological and microbiological investigations.

OBJECTIVE

To describe clinico-laboratory profile of acute febrile illnesses among inpatients in a tertiary care hospital.

METHODS

The study is a prospective, observational study conducted in a tertiary care hospital in Nellore, India. Between October 2018 to may 2019, adult patients admitted to the hospital with acute febrile illness were included. This study consists of 300 patients of ages 18 to 60 years.

On admission, after obtaining a detailed history a thorough clinical examination was done to check for symptoms and signs, then the patient's blood and serum sample were collected and various diagnostic tests for Malaria, Dengue, Typhoid, Scrub typhus, Leptospirosis, were done.

EXCLUSION CRITERIA

1. autoimmune diseases,
2. hematological malignancies and
3. those on immunosuppressant drugs were excluded from the study.

GENDER WISE DISTRIBUTION

Study group included more number of females than males. Females accounted to 63 percent (n=189) and males 37 percent (n=111).

Study group included patients of ages 18 to 60 years of which house wives were 110(36.6%), agricultural labourers were 65(21.6%), daily wage workers were 47(15.6%), students were 44(14.6%), office employees were 34(11.3%).

Table 1. common symptoms reported amongst the patients included.....

SYMPTOMS	Percentage
Generalized body ache & myalgias	80%
Headache	70.8%
Abdominal pain	65.2%
Vomiting	63.4%
Cough	40.4%
Breathlessness	36.9%
Loose motion	20.6%
Bleeding manifestations	8.8%

RESULTS

Table 2

DIAGNOSIS	NUMBER OF PATIENTS
Dengue	90(30%)
Malaria	30(10%)
Pneumonia	30(10%)
Typhoid	8(2.6%)
Scrub typhus	5(1.6%)
Leptospira	3(1%)
viral illness related fevers and other causes	134(44.6%)

Table 3

LAB RESULTS

	Number of patients
Thrombocytopenia	212
Leukopenia	92
Leukocytosis	66
Anemia	47
Altered LFTs	124
Altered RFTs	84
Altered coagulation profile	68
Ascitis (mild/moderate/severe)	44
Pleural effusion(CXR)	38

Conclusion

It is essential to know the cause and clinical profile of AFIs for their proper management, and to help prevent morbidity and mortality. Our study revealed that predominant cause of AFI, in our area was dengue, followed by malaria and pneumonia, accompanied by typhoid fever, scrub typhus and leptospirosis being the least on the basis of serological tests and other laboratory investigations.

With comprehensive laboratory investigations, a microbiological cause of AFI was identified in 55.4% of collected subjects.

The similar way in which patients present clinically, diversity of etiological agents, an inability to identify an aetiology in a significant number of cases, demonstrate the complexity of diagnosis, and treatment of AFI in South India.

ABBREVIATIONS

AFI- ACUTE FEBRILE ILLNESS

DECLARATION

Funding: None

Conflict of interest: None declared

Ethical approval: Study was approved by institutional ethics committee.

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