ASSESSMENT OF TYPES OF FEVERS IN A TERTIARY CARE HOSPITAL

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ABSTRACT

Aim: The study aims at Assessment of types of fevers in a tertiary care hospital. Methods: It is a prospective study done for three months. The data was collected from the Patient case sheets. The statistical analysis was performed to analyse the data. The P value is p < 0.001 respectively. Results and discussion: The total 108 patients were enrolled in the study. The present study consist of males are 47% and females are 53% in the study population. The study consist of viral fever patients 31%, viral fever with thrombocytopenia 21%, dengue cases 15%, fever with lower respiratory tract infections 11%, malaria patients 6%, typhoid patients 5%, fever with urinary tract infection 4%, other cases includes hepatic infections, pulmonary tuberculosis, pneumonia, with decreasing in blood cells count with Acute exerabations were 7%. This study consist of Platelet transfusions are given to the patients with viral fever 28%. The study consist of a dengue with thrombocytopenia with platelet transfusions received patients were 11%. Dengue with thrombocytopenia Patients without platelet transfusions 89%. Conclusion: we conclude that fevers were transmitted by mosquitos. Dengue is spreads through Aedes egypti species, Malaria is caused by P.falciparum, P.vivax. Thyphoid is caused by salmonella typhi. Chikungunya caused by chikungunya virus. Dengue can be prevented by using mosquito nets, repellents and consumption of boiled water, food with hygiene. Prolong use of mosquito repellents causes...
the Peripheral Neuropathy. We can prevent such complications through early detection and treatment is needed.

**KEY WORDS:** Thrombocytopenia, Acute exacerbations, infections, Platelet transfusions.

**INTRODUCTION**

Viral fevers associated with elevations of body temperature. Viral infections are spread by mosquitos intake of contaminated water or food, or by direct contact. Infection then spreads locally and there after into the blood stream or lymph channels.\(^1\) This is followed by a prodromal phase of fatigue, malaise and body and muscle aches that may lead to the onset of fever.\(^2\) The fever may be low grade or high grade and remittent. Inflammation of the pharynx, a running nose, nasal congestion, headache, redness of the eyes, cough, muscle and joint pains and a skin rash could be present.

**Diagnosis:** Blood test, LFT, RFT, ESR test, CRP test, widal test, HBSAg, HCV test, HIV test, sputum culture test.

**Dengue**

Dengue fever is a disease caused by infection with a type of virus called Flavivirus. There are four different subtypes of this virus producing varying manifestations of the disease.\(^4\) The disease is spread through the bites of mosquitoes belonging to the Aedes egypti species.

Dengue fever is transmitted to humans by the bite of the infected Aedes egypti mosquito. The Aedes mosquito breeds in relatively fresh water, lives close to human habitations and bites during the day. The incubation period between the bite and the onset of symptoms is usually two to seven days.\(^3\) The Aedes mosquito is also responsible for the spread of diseases such as yellow fever and Chikungunya virus fever. The symptoms include severe headache, vomiting, and photophobia. Examination of the patient may reveal few findings such as a rash and pain on palpation of the muscles.

**Diagnosis**

Blood test, LFT, RFT, ESR test, CRP test, widal test, HBSAG, HCV, HIV test, sputum culture test, IGG, IGM test.

**Malaria** is a mosquito-borne infectious disease of humans and other animals caused by parasitic protozoans (a group of single-celled microorganisms) belonging to the genus Plasmodium. Malaria causes symptoms that typically include fever, fatigue, vomiting,
and headaches. In severe cases it can cause yellow skin, seizures, coma or death. The disease is transmitted by the biting of mosquitos, and the symptoms usually begin ten to fifteen days after being bitten.\textsuperscript{[4]} The symptoms include headache, fever, shivering, joint pain, vomiting, hemolytic anemia, yellow skin, hemoglobin in the urine, retinal damage\textsuperscript{[8]}, and convulsions. Malaria is usually confirmed by the microscopic examination of blood films or by antigen-based rapid diagnostic tests (RDT). It is caused by P. falciparum, P. malariae, P. ovale, P. vivax and P. knowlesi. Among those infected, P. falciparum, P. vivax.\textsuperscript{[9]}

**Pathophysiology**

The symptoms include headache, fever, shivering, joint pain, vomiting, yellow skin, yellow eyes, vision loss and convulsions.\textsuperscript{[10]} The diagnosis includes blood test, urine test, liver function test, renal function test. Typhoid fever\textsuperscript{[4]} is a bacterial infection due to Salmonella typhi parasite that causes the infection. The symptoms include Weakness, abdominal pain, constipation, and headaches also commonly occur.\textsuperscript{[11]} The cause is the bacterium Salmonella typhi, also known as Salmonella enterica serotype typhi, growing in the intestines and blood. Typhoid is spread by eating or drinking food or water contaminated with the feces of an infected person.\textsuperscript{[11]} The diagnosis of the disease includes blood, bone marrow or stool cultures, Widal test were used. The urinary tract infection\textsuperscript{[11]} that affects part of the urinary tract. When it affects the lower urinary tract it is known as a simple cystitis and when it affects the upper urinary tract it is known as pyelonephritis.\textsuperscript{[5]} The Symptoms from a lower urinary tract include painful urination and either frequent urination\textsuperscript{[1]} difficulty in urination, fever and flank pain in addition to the symptoms includes lower urinary tract infection. The diagnosis of the disease includes urine culture test, dipstick test were followed.
AIM: Assessment of types Of Fevers in a Tertiary Care Hospital.

OBJECTIVES
1. Decrease the Fever Complications
2. Improve the Patient care
3. Decreasing mortality and morbidity of Patients
4. Improve the therapeutic outcomes.

METHODOLOGY
1. Patients were included in the study after obtaining written informed consent form and were selected based on the inclusion and exclusion criteria.
2. Total 108 patients were selected.
3. Patient demographic details like name, age, sex, date of admission, and details like past medical history, Past medication history were collected.
4. Statistics which are applicable to this study included.

Study design
It is a Prospective observational study.

Department selected for study
Department of General Medicine

Selection of Patients
inpatients in the general medicine department

Site of study
Rajivgandhi institute of medical sciences.Kadapa

Study period
October 2015 to December 2015

Sample size
108 patients

Patient selection
Inclusion criteria
1. patients who are willing to participate in study
2. patients greater than 10 years of age

**Exclusion Criteria**

Patients who are not willing to participate in study

- Paediatric patients
- Pregnant Women
- Lactating women
- Renal or hepatic impairments
- Patients who are not willing to participate in the study

**RESULTS**

In the present study we had assessed 108 patients and it is classified as follows.

**ACCORDING TO THE AGE WISE**

In our study age wise fever in males consist of 11-20 age patients were 18%, 21-30 age patients were 24%, 31-40 age 13%, 41-50 age patients were 11%, 51-60 age patients were 7%, 61-70 age patients were 18%, 71-80 age patients were 7%, 81-90 age patients were 2%.

![Age Wise Fever in Males](image)

**Age Wise Fever in Females**

In our study age wise fever in females consist of 11-20 age patients were 30%, 21-30 age patients were 32%, 31-40 age 11%, 41-50 age patients were 6%, 51-60 age patients were 11%, 61-70 age patients were 2%, 71-80 age patients were 6%, 81-90 age patients were 2%.
ACCORDING TO THE GENDER WISE
The present study consist of males are 47% and females are 53% in the study population.\textsuperscript{[14]}

DIFFERENT TYPES OF FEVER
The study consist of viral fever patients 31%, viral fevr with thrombocytopenia\textsuperscript{[6]} 21%, dengue cases 15%, fever with lower respiratory tract infection 11%, malaria patients 6%. typhoid patients 5%, fever with urinary tract infection 4%, other cases includes jaundice, pulmonary tuberculosis, pneumonia, fever with anemia, fever with seizures, fever with hemiparesis, fever with Acute Exerberations patients were 7%.
VIRAL FEVER WITH PLATELET TRANSFUSIONS
This study consist of platelet transfusions are given to the patients 28%. The platelet transfusions were not given to the patients 72%.

![Patients with platelet transfusions information](image1)

CAUSES OF FEVER
The study consists of the fever is caused by mosquito bite is 20%. The contaminated food and water is 5%. Other symptoms include cough and hygiene is 75%.

![Causes of fever](image2)

DENGUE WITH THROMBOCYTOPENIA
It consists of dengue with thrombocytopenia with platelet transfusions received patients were 11%. Dengue with thrombocytopenia patients without platelet transfusions 89%.

![Dengue with thrombocytopenia](image3)
DISCUSSION OF RESULTS

Present study consist of age wise fever in males consist of 11-20 age patients were 18%, 21-30 age patients were 24%, 31-40 age 13%, 41-50 age patients were 11%, 51-60 age patients were 7%, 61-70 age patients were 18%, 71-80 age patients were 7%, 81-90 age patients were 2%.

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The Present study consist of males are 47% and females are 53% in the study population.

The study consist of viral fever patients 31%, viral fever with thrombocytopenia 21%, dengue cases 15%, fever with lower respiratory tract infection 11%, malaria patients 6%, typhoid patients 5%, fever with urinary tract infection 4%, other cases includes jaundice, pulmonary tuberculosis\[11,12\], pneumonia, fever with anemia, fever\[9\] with seizures, fever with hemiparesis, fever with Acute exacerbations of Pulmonary diseases were 7%.

This study consist of platelet transfusions are given to the patients with viral fever 28%. The platelet transfusions were not given to the patients is 72%. The study consist of a dengue with thrombocytopenia with platelet transfusions received patients were 11%. Dengue with thrombocytopenia patients without platelet transfusions\[10\] 89%.

CONCLUSION

We conclude that fevers were transmitted by mosquitos. Dengue is spreads through Aedes aegypti species, Malaria is caused by P.falciparum, P.vivax. Typhoid is caused by salmonella typhi. Typhoid and diarrhoea are prevented by avoid drinking contaminated water and food and maintaining hygienic conditions. Viral fever can be prevented by proper cougher hygiene (masks). Dengue can be prevented by using mosquito nets, mosquito repellents. Prolong use of mosquito repellents causes the Peripheral Neuropathy\[13\] due to permethrin chemical. We can prevent such complications through early detection Diagnosis and treatment is needed.

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