STUDY OF CLINICAL PROFILE OF FEBRILE CHILDREN PRESENTING WITH THROMBOCYTOPENIA

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INTRODUCTION

- Patients with acute febrile illnesses in a tropical country like India usually have an infectious etiology and may have associated thrombocytopenia.

- Infections like malaria, dengue, leptospirosis, and typhoid are some of the common causes of fever with thrombocytopenia.

- A well-organized systematic approach that is carried out with an awareness of the causes of fever with thrombocytopenia can shorten the number of investigations and bring out the diagnosis.

- Thrombocytopenia being a prognostic factor in fever can predict the cause and thus helps in early diagnosis and treatment of the same, preventing further fatal outcomes such as intracranial bleeding, hemorrhage into vital organs, shock, and death.

- Hence analyzing the clinical profile of fever with thrombocytopenia, as early diagnosis and timely intervention would prevent adverse outcomes and save lives.

AIM AND OBJECTIVES

- To study the Clinical Presentation and Profile of Febrile illnesses causing Thrombocytopenia under Etiological basis.

- To Study the Complications and Prognosis of the febrile illnesses with thrombocytopenia

MATERIALS AND METHODS

- <u>Type of Study</u>: Cross Sectional observational study

- <u>Study area:</u> Hospital based study conducted at Jagjivan Ram Hospital Mumbai.

- Institutional Scientific and Institutional Ethical Committee approval was taken before conducting this study

- <u>Study Duration</u> : 1 year .

- <u>Sample Size</u>: 150 cases were selected aged less than 18 years having fever and thrombocytopenia.

- <u>Sample size</u> was calculated using formulae: $N = Z*2\ p(100-p)/\ d2$, prevalence being 25%

N = 150 of children less than 18 years.

- <u>Inclusion criteria</u>: Patients of both sexes aged >1 month to < 18 years after taking written informed consent by both the parents . Patients admitted with fever and found to have thrombocytopenia (platelet count <1.5 lakhs).

- <u>Exclusion Criteria:</u>

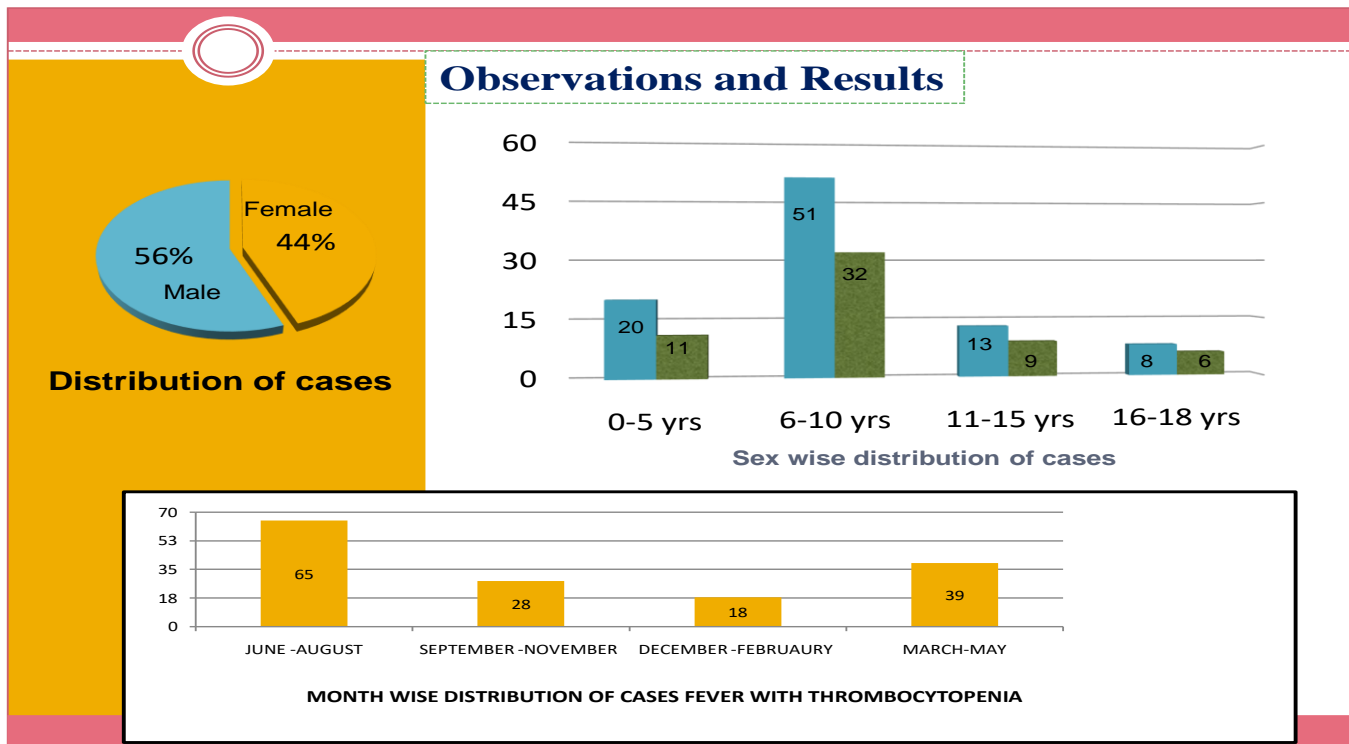1.Patient presenting with thrombocytopenia without fever

2.diagnosed cases of thrombocytopenic purpura on treatment.

3.Diagnosed cases of platelet disorders and dysfuntion.

4.Patients on treatment with anti-platelet drugs and other drugs causing thrombocytopenia.

5.Patients with thrombocytopenia already diagnosed to have hematological disorder/

Malignancy ,on treatment with chemotherapy and other immunosuppressant.

Observations and Results

Distribution of cases

Sex wise distribution of cases

MONTH WISE DISTRIBUTION OF CASES FEVER WITH THROMBOCYTOPENIA

Observations and Result

Outcome	Count	Percentage(%)
Discharges	145	96.66%
Complicated	5	3.33%
Total	150	100%

Outcome of cases of fever with thrombocytopenia
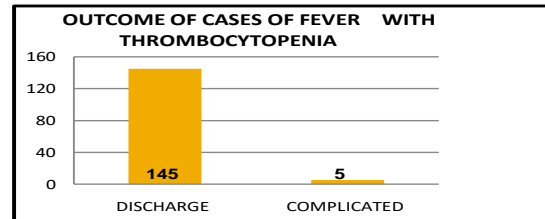

No. of patients with thrombocytopenia
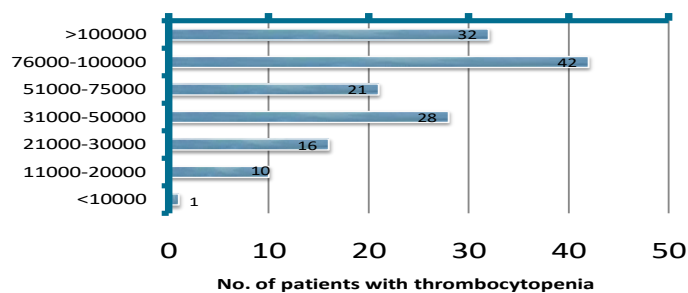
Observations and Results
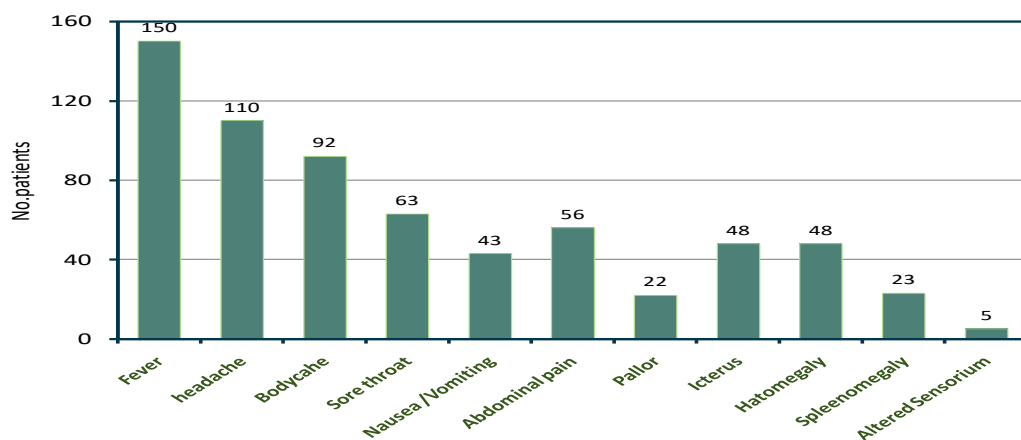
Clinical features associated with thrombocytopenia

Observations and Results

Distribution of cases according to platelet counts and etiology

Platelet Count	AUFI	Dengue	Malaria	Mixed (Dengue + Malaria)	Enteric fever	Septicaemia
>50000	52	23	12	2	7	0
20000-50000	31	5	3	1	2	2
10000-20000	3	3	2	0	1	0
<10000	0	1	0	0	0	0
Total	86	32	17	3	10	2

OUTCOME OF CASES OF FEVER WITH THROMBOCYTOPENIA

CONCLUSIONS

- The maximum number of cases was found to be in the age group of 5-10 years,

- With a Male: Female ratio of 56% : 44%.

- Infection is the commonest cause of fever with thrombocytopenia. (01)

- Acute undifferentiated febrile illnesses were the commonest cause when a definitive diagnosis could not be made.(15)

- Dengue formed the second largest group in diagnosed cases. (02)

- Malaria was the third largest with vivax being the commonest species.(03,04)

- The common range of platelet count at the time of admission was above 50,000/uL. (05)

- Among cases with bleeding manifestations, petechia/purpura was the most common presentation. (06,05,07)

- Most who showed bleeding manifestations were found to be dengue cases. (06)

- Majority of leucocytosis was seen in acute febrile illnesses followed by dengue, malaria, enteric fever, and sepsis.

- Majority of leucopenia was found in dengue followed by malaria cases. (05,06)

- Hypotension was the most common complication found in the study.(08)

- Among mortalities, Sever Dengue was the most common etiology followed by septicemia.(09)

- Deaths in the study were due to multiorgan dysfunction. (09)

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