

CLINICAL PROFILE OF TYPHOID FEVER IN CHILDREN

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Conflict of interest: No conflict of interest.

Abstract

Background: The present study describes the clinical presentation of enteric fever at a tertiary care centre.

Methods: The study was a hospital based prospective observational study conducted on children of age 2 -18 years who presented with fever of 5 days or more with clinical signs and symptoms suggestive of typhoid fever and positive Widal test or Typhidot tests were included in the study. The demographic and clinical features of the patients were described.

Results: All the children presented with fever as the main complaint (100%). Commonest sign noticed was toxic look (84%) followed by coated tongue (79%) and splenomegaly (61%). Hepatomegaly was also noted in 34% of cases.

Conclusion: This study was undertaken to observe the clinical profile of typhoid fever in children admitted in a tertiary care hospital. Typhoid fever remains to be as an endemic disease in this locality. All the signs and symptoms of the disease are nonspecific common with other acute febrile illnesses; a definitive diagnosis of the disease is required for treatment and to prevent transmission.

Keywords: Enteric fever, Splenomegaly, Toxic look

Introduction

Typhoid fever is a life-threatening disease occurring more frequently in under developed areas of the world and it continues to pose a major public health problem. There are around 16 million new enteric fever cases reported globally.¹ The annual incidence of enteric fever has been reported as more than 13 million cases in Asia alone and it causes annual deaths of more than 0.6 million across the world.² The incidence of Typhoid fever in India is 2.14 per thousand populations.³ The incidence of typhoid fever in the younger age group is also on the increase and the disease which was reported to be very rare below the age of three years is not correct and now there is documented evidence that enteric fever will not spare any age.⁴ In endemic areas such as India, traditional signs and symptoms in enteric fever are not often observed. Unusual presentations lead to diagnostic dilemma and may delay the diagnosis of typhoid fever⁵⁻⁷. The present study describes the clinical presentation of enteric fever at a tertiary care centre in Rajasthan.

Methods

The study was a hospital based prospective observational study. The parents of the children were informed about the research and its objectives, and written informed consent was obtained from them.

Children of age 2 -18 years who presented with fever of 5 days or more with clinical signs and symptoms suggestive of typhoid fever and positive Widal test or Typhidot tests were included in the study.

The demographic and clinical features of the patients were described. All children were enquired about a careful history including family history of similar illness and socio-economic status, source of drinking water.

Children who have been diagnosed as paratyphoid fever by serology like Widal test were clearly excluded from the study. Total leukocyte count was done in all patients.

Results

Table 1: Symptoms at the time of admission to hospital

Symptoms	Number of patients	Percentage
Fever	100	100.00
Anorexia	61	61.00
Vomiting	35	35.00
Diarrohea	16	16.00
Abdominal pain	33	33.00
Constipation	19	19.00
Headache	56	56.00
Cough	19	19.00

All the children presented with fever as the main complaint (100%). Loss of appetite and headache were the next common complaints reported by 61.00% cases.

Table 2: Signs at the time of admission to the hospital

Sign	Number of patients	Percentage
Coated tongue	79	79.00
Anemia	37	37.00
Abdominal tenderness	28	28.00
Toxic look	84	84.00
Hepatomegaly	34	34.00
Splenomegaly	61	61.00
Respiratory infections	3	3.00

Commonest sign noticed was toxic look (84%) followed by coated tongue (79%) and splenomegaly (61%). Hepatomegaly was also noted in 34% of cases.

Discussion

All present study subjects presented with fever as the main complaint (100%). Loss of appetite and headache were the next common complaints reported by 61.00% cases.

Study by Modi R reported that gastrointestinal complaints were second most common after fever with abdominal pain noticed in 57.14% patients and vomiting in 50% of the patients.⁷

Similar observations were reported by Comeau et al and Kapoor JP et al and Sinha et al.^{6,9,10} However, Joshi et al reported that headache was the most common symptom after fever seen in 52.5% cases and abdominal pain and vomiting were the other common associated symptoms seen in 22.5% and 20% cases respectively.¹¹

Commonest sign noticed was toxic look (84%) followed by coated tongue (79%) and splenomegaly (61%). Hepatomegaly was also noted in 34% of cases.

Devaranavadagi RA and Srinivasa S also reported Toxic look (68%) as the most common sign followed by coated tongue (49%), Hepatomegaly (44%), and other signs.⁸ However, Laishram et al reported coated tongue (80%) as the most common sign followed by Hepatomegaly (76%) and splenomegaly (38%).¹²

Conclusion

This study was undertaken to observe the clinical profile of typhoid fever in children admitted in a tertiary care hospital. Typhoid fever remains to be as an endemic disease in this locality. All the signs and symptoms of the disease are nonspecific common with other acute febrile illnesses; a definitive diagnosis of the disease is required for treatment and to prevent transmission.

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