CLINICAL PROFILE OF TYPHOID FEVER IN CHILDREN

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Abstract

Background: The present study describes the clinical presentation of typhoid fever.

Methods: The study was a hospital based prospective study. 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.

Results: Commonest sign noticed was toxic look (88.00%) followed by coated tongue (79.00%) and splenomegaly (63.00%). Hepatomegaly was also noted in 35.00% of cases.

Conclusion: 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.

Material and Methods

The study was a hospital based prospective observational study. 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

<table>
<thead>
<tr>
<th>Symptoms</th>
<th>Number of patients</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fever</td>
<td>100</td>
<td>100.00</td>
</tr>
<tr>
<td>Anorexia</td>
<td>62</td>
<td>62.00</td>
</tr>
<tr>
<td>Vomiting</td>
<td>33</td>
<td>33.00</td>
</tr>
<tr>
<td>Diarrhoea</td>
<td>15</td>
<td>15.00</td>
</tr>
<tr>
<td>Abdominal pain</td>
<td>31</td>
<td>31.00</td>
</tr>
<tr>
<td>Constipation</td>
<td>18</td>
<td>18.00</td>
</tr>
<tr>
<td>Headache</td>
<td>56</td>
<td>56.00</td>
</tr>
<tr>
<td>Cough</td>
<td>19</td>
<td>19.00</td>
</tr>
</tbody>
</table>
All the children presented with fever as the main complaint (100%). Loss of appetite and headache were the next common complaints reported by 62.00% cases.

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

<table>
<thead>
<tr>
<th>Sign</th>
<th>Number of patients</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coated tongue</td>
<td>79</td>
<td>79.00</td>
</tr>
<tr>
<td>Anemia</td>
<td>42</td>
<td>42.00</td>
</tr>
<tr>
<td>Abdominal tenderness</td>
<td>28</td>
<td>28.00</td>
</tr>
<tr>
<td>Toxic look</td>
<td>88</td>
<td>88.00</td>
</tr>
<tr>
<td>Hepatomegaly</td>
<td>35</td>
<td>35.00</td>
</tr>
<tr>
<td>Splenomegaly</td>
<td>63</td>
<td>63.00</td>
</tr>
<tr>
<td>Respiratory infections</td>
<td>3</td>
<td>3.00</td>
</tr>
</tbody>
</table>

Commonest sign noticed was toxic look (88.00%) followed by coated tongue (79.00%) and splenomegaly (63.00%). Hepatomegaly was also noted in 35.00% 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 62.00% 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 seen in 52.5% patients and vomiting in 20% cases respectively.11

Commonest sign noticed was toxic look (83%) followed by coated tongue (76%) 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

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.

### References