Introduction:
Enteric fever is an important public health problem in many of the developing countries. Estimates of the global burden of typhoid fever suggest an annual incidence of 12.5 million cases, with three-quarters occurring in Africa and South-East Asia. The incidence of typhoid fever is considered to be low in the first few years of life, peaking in school age children and young adults and then falling in the middle age. Various organs have been affected in the course of enteric fever; and there is a wide array of presentations varying from nonspecific febrile illness to one of the severe life threatening illness. Emerging MDR S typhi is a concern about response to treatment among treating physicians. Salmonella typhi infection results in a clinical syndrome that varies widely in presentation; especially in new antibiotic era. Records of 52 enteric fever cases who were admitted to BSMMU, from July 2007 to June 2008 was reviewed and information was recorded in a prescribed form. Descriptive analysis was done through SPSS. Mean age was 6.7±4 years and male: female ratio was 1:2. Most common presenting features were fever in 100% cases, abdominal pain 40% cases, vomiting 35% and diarrhea, constipation 10% cases. Hepatomegaly was present in 71% and splenomegaly in 52% cases. In our study, 32% of children were under 5 years; and the result is similar with some other studies. Typhoid fever is still a disease which is difficult to diagnose. In some cases of delayed response antibiotic may be required for longer duration where patients became afebrile after 10 days or more from starting antibiotic.

Abstract:
Enteric fever remains a serious problem in developing countries. School aged children and young adults are mainly the sufferer. Salmonella typhi infection results in a clinical syndrome that varies widely in presentation; especially in new antibiotic era. Records of 52 enteric fever cases who were admitted to BSMMU, from July 2007 to June 2008 was reviewed and information was recorded in a prescribed form. Descriptive analysis was done through SPSS. Mean age was 6.7±4 years and male: female ratio was 1:2. Most common presenting features were fever in 100% cases, abdominal pain 40% cases, vomiting 35% and diarrhea, constipation 10% cases. Hepatomegaly was present in 71% and splenomegaly in 52% cases. In our study, 32% of children were under 5 years; and the result is similar with some other studies. Typhoid fever is still a disease which is difficult to diagnose. In some cases of delayed response antibiotic may be required for longer duration where patients became afebrile after 10 days or more from starting antibiotic.

Key words: enteric fever, children, presentation

Materials and methods:
We reviewed all patients of Paediatric medicine unit 1 of BSMMU who were admitted over the period from July 2007 to June 2009. BSMMU is a referral hospital in Dhaka city where typhoid fever is endemic. In this ward children aged 1 month to 15 years were admitted. And cases were selected with strong clinical suspicion of enteric fever – like high continued fever for 7 days or more, along with one or more clinical features suggestive of enteric fever – like abdominal pain, vomiting, constipation, loose motion, abdominal distension, tenderness and hepato-splenomegaly. Other febrile illness was excluded. Patients were investigated to confirm the diagnosis and exclude other diagnosis and for any complications. Investigations were CBC, Widal test, blood culture & sensitivity, ALT, S bilirubin. Final diagnosis was considered with suggestive clinical features and positive Widal test or positive blood culture. All patients were treated with injectable antibiotics and

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followed up regularly. Antibiotics were continued up to 5 days after the patient became afebrile. Patients were discharged after complete antibiotic course and followed up 2 weeks after discharge.

**Results:**
Records of a total 52 cases of typhoid fever were analyzed. Mean age was 6.7 ± 4 years. And male: female ratio was 1.2: 1. Most common presenting features were fever 100% cases, abdominal pain 40% cases, vomiting 35% and constipation 10% cases. About physical findings 71% had hepatomegaly and 52% had splenomegaly.

**Table-I**
*Symptoms and signs of patients at presentation*

<table>
<thead>
<tr>
<th>Symptoms Features</th>
<th>(% of patients)</th>
<th>Signs Features</th>
<th>(% of patients)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fever</td>
<td>100</td>
<td>Abdominal distention</td>
<td>19</td>
</tr>
<tr>
<td>Abdominal pain</td>
<td>40</td>
<td>Abdominal Tenderness</td>
<td>39</td>
</tr>
<tr>
<td>Vomiting</td>
<td>35</td>
<td>Hepatomegaly</td>
<td>71</td>
</tr>
<tr>
<td>Diarrhoea</td>
<td>19</td>
<td>Splenomegaly</td>
<td>52</td>
</tr>
<tr>
<td>Constipation</td>
<td>10</td>
<td>Rose spot</td>
<td>2</td>
</tr>
<tr>
<td>Cough</td>
<td>8</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

All patients received injection ceftriaxone and resolution of fever showed a wide range of 1 – 15 days with a mean of 6.5 days. During this study period, no death occurred due to typhoid fever.

**Discussion:**
Salmonella typhi infection remains a serious problem in developing countries and a major cause of mortality and morbidity. In our study, 32% of children were under 5 years; and the result is similar with some other studies. In our series, diarrhoea was predominant gastrointestinal symptoms than constipation, and in accordance with other studies. Typhoid is still difficult to diagnose, particularly in infants, Matheu et al reported 10 patients in their series presenting with mild illness like fever and cough. In our study, 8% children presented with fever and cough.

In a study, febrile convulsion was presenting symptom in 20% of the patients. In our study, none of the patient presented with seizure. In our study, hepatomegaly was higher than splenomegaly (71% vs. 52%), which is in accordance with other studies. Ohel and Latitan reported that, in their series hepatomegaly was almost twice as frequent as splenomegaly. In another study in Turkey, Kanra et al found 17% encephalopathy, 73% hepatitis, 4% pneumonitis, 4% gastrointestinal bleeding; but we did not find similar features. Some of our children required antibiotics for a longer duration even up to 23 days. In case of delayed responders, we did not change the antibiotics when the patients were seen to be stable i.e. not deteriorating clinically and also isolates were found to be sensitive to the given antibiotic. No fatal outcome occurred in this series.

**Conclusion:**
Enteric fever is variable in presentation, none of the investigations is conclusive; sensitivity of Widal test is slight higher but specificity is low and both sensitivity and specificity of blood culture are low. So knowledge of variable presentations could help in diagnosis. It appears that in case of appropriate antibiotic we can wait safely for a longer period; here we waited up to 15 days for convalescence and no harm occurred. Rather frequent change of antibiotics may linger the illness and may lead to antibiotic resistance.

**References:**


