



CLINICAL PROFILE OF CHILDREN WITH CULTURE POSITIVE ENTERIC FEVER, A PROSPECTIVE DESCRIPTIVE CLINICAL STUDY

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ABSTRACT 82 cases of culture positive Typhoid cases were studied over a period of 2 years from January 2017 to December 2018. Coated tongue was seen in 40.2% and toxic look typical typhoid was seen in only 26.83% of cases¹. Hepatomegaly alone is more commoner finding than hepatosplenomegaly (46.34% vs 31.7%). Acute abdomen was initial presenting feature in 2.44% of cases. Complications including shock, encephalopathy, septic arthritis and osteomyelitis complex, acute abdomen and jaundice were seen in 19.51% of cases. No mortality despite complications was observed^{2,3}. Bleeding in to gut and perforation are not seen in this series.

KEYWORDS :

INTRODUCTION

Enteric fever is a quite common infectious illness in pediatric practice⁴. With the free availability of BacTec culture methods it is now routine to send Blood for culture and sensitivity before starting antibiotic therapy. To know the clinical presentations of Enteric fever and to assess the rate of complications the present study is undertaken which can enable early detection and to start therapy early.

MATERIALS AND METHODS

82 culture positive cases of Enteric fever were identified in dept of Pediatrics, Govt. General Hospital, Kurnool from January 2017 to December 2018 over a period of two years.

BacTec method of cultures were used. All children with clinical suspicion of Typhoid fever were subjected to Culture and sensitivity testing of Blood before starting antimicrobial therapy. All the culture positive cases were grouped, and the data of clinical presentations and complications and outcome of therapy were recorded.

All the results were tabulated analysis was done using SSP statistical software.

RESULTS AND DISCUSSION

Table 1:- Distribution Of Cases In Relation To Age And Sex

Age group	Male	Female	Total
<1 year	4	1	5 (15.85%)
1-3 years	7	6	13 (26.83%)
4-6 years	9	13	22(26.83%)
>6 years	24	18	42 (51.21%)
Total	44 (53.66%)	38 (46.34%)	82 (100%)

Majority of cases were seen in the age group of 4-12 years (78.04% of cases ie. 64 cases out of 82). Rest of cases were seen in children of less than 3 years age group (18 out of 82 cases accounting for 21.96%) 53.66% were males compared to 46.34% of female children.

Table 2:- Distribution Of Cases In Relation To Presenting Clinical Syndrome

Presenting symptom complex	Number of cases	percentage
Onset with Flu like symptom complex	38	43.34%
Onset without Flu like symptom complex	44	53.66%
Diarrheal onset	5	6.1%
Arthritis & Osteomyelitis presentation	2	2.44%
Encephalopathy presentation	2	2.44%
Abdominal pain presentation	2	2.44%

Onset of illness was with Flu like symptoms in 43.34% of cases, to make a point that flu like presentation need not necessarily be nonbacterial. NO flu like symptoms in 53.66% of children.

Profuse watery diarrhea with spiking fevers was seen in 5 children accounting for 6.1% of cases. Similarly, Septic arthritis of right knee joint and Osteomyelitis of Right femur were seen in one in each case.

Altered Sensorium mimicking Meningoencephalitis were seen in 2 children accounting for 2.44% of cases. Fever with abdominal pain with splenic abscess in one child and Acute appendicitis picture in one case (USG abdomen showed appendicular diameter of 6.5mm), constituting 2.44% of all children.

Table 3:- Distribution Of Cases In Relation To Physical Findings On Examination

Physical finding	Number of cases	percentage
Toxic look	22	26.83%
Centrally coated tongue	33	40.24%
Hepatomegaly alone	38	46.34%
Splenomegaly alone	8	9.76%
Hepatosplenomegaly	26	31.7%
No Organomegaly	10	12.2%
Shock (Diarrhea)	2	2.44%
Encephalopathy	2	2.44%
Arthritis/Osteomyelitis	2	2.44%
Splenic abscess	1	1.22%
Acute Appendicitis	1	1.22%

Typical Toxic look was seen in only 26.83% of cases. Coated tongue was observed in 40.24% of cases. Hepatomegaly alone (46.34%) was more common than Hepatosplenomegaly (31.7%). It was observed that 12.2% of children did not show any organomegaly and splenomegaly was seen in 9.76% of cases.

Table 4:- Distribution Of Cases In Relation To Complications Observed

Complication Observed	Number of cases	percentage
Shock	2	2.44%
Encephalopathy	2	2.44%
Septic Arthritis/Osteomyelitis	2	2.44%
Splenic Abscess	1	1.22%
Acute Appendicitis	1	1.22%
Bleeding	0	0
Perforation	0	0
Jaundice	8	9.76%
Total	16 (n=82)	19.51%

Complications were observed in 16 children out of 82 cases (19.5%). Shock with profuse diarrhea was seen 2 children (2.44%). This group is especially important as treatment with high dose dexamethasone can reduce the mortality along with antimicrobial therapy. Similarly encephalopathy too benefits from steroid usage as per protocol. (2.44%).

Septic arthritis and osteomyelitis complex was observed in two children requiring surgical drainage and antibiotic therapy for 4-6

weeks (2.44%).

Acute appendicitis responded to antimicrobial therapy for 14 days without resorting to surgery, but splenic abscess required splenectomy along with antibiotic therapy. (1.22% each).

Bleeding and perforation are not observed in this series which used to be frequent in olden days.

Jaundice with mild elevation of Transaminases and with normal prothrombin time were seen in 8 children (9.76%).

Table 6:- Distribution Of Cases In Relation To Treatment Outcome

Outcome	Number of cases	percentage
Survival	82	100%
Non-Survival	0	0

No mortality was observed and all children even with complications survived (100% survival)

CONCLUSIONS

1. A total of 82 cases were proved positive for Salmonella Serovar Typhi
2. All children were examined for clinical presentation, various physical findings and complications and outcome
3. Hepatomegaly alone was more common than hepatosplenomegaly
4. Diarrhea with shock is a distinct entity requiring dexamethasone along with antibiotic therapy
5. Splenic abscess and Acute appendicitis with acute abdominal presentation requires careful consideration of surgical versus non-surgical approach
6. Acute osteomyelitis and septic arthritis presentation require prolonged antimicrobial therapy along with surgical involvement
7. Complications were observed in 19.5% of cases
8. Survival was 100% despite complications.

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