

TABLE I—Number of Cases who took Longer Period for Defervescence and the Associated Complications

Case number	Time taken for defervescence day	Associated complications
1	11	Gastrointestinal bleeding, hepatitis, cholecystitis and encephalopathy
2	16	Hepatitis and meningitis
3	13	Gastrointestinal bleeding and myocarditis
4	12	Myocarditis, peripheral circulatory failure, encephalopathy,
5	11	Gastrointestinal bleeding and encephalopathy

nolones in adolescent animal models, long term studies in human beings do not favor this hypothesis(1,2). Besides this, only 6 cases of *S. typhi* showing *in vitro* resistance to ciproflox were isolated in three years in

a tertiary centre like ours where the drug is being used to treat life threatening Gram negative sepsis and multidrug resistant enteric fever. Hence, ciprofloxacin may be used in the treatment of life threatening complications of typhoid fever without apprehension regarding the quick development of drug resistance.

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REFERENCES

1. Adams D. Use of quinolones in pediatric patients. Rev Infec Dis 1989, II Suppl 5: 1113-1116.
2. Ball P. Long term use of quinolones and their safety. Rev Infec Dis 1989, II Suppl 5: 1365-1370.

Venous Thrombosis in Enteric Fever

Enteric fever still continues to be rampant in our country. Despite the availability of effective antimicrobials it is still associated with a fairly high incidence of serious complications. Venous thrombosis was a common complication before the antibiotic era and often occurred in the fourth week of illness(1). After introduction of effective antimicrobials, thrombosis and phlebitis occur

rarely(2). We report here a case of enteric fever with venous thrombosis because of its rarity and its association with shock, acute renal failure, and localized abscess.

A 9-year-old girl was admitted with continuous high grade fever and pain abdomen for seven days. Fever was accompanied by chills and rigors. She had also oliguria, swelling and pain over right lower limb for last four days prior to admission. Physical examination revealed a stuporous, toxic child with moderate anemia, imperceptible peripheral pulses, cold extremities. Her systolic

blood pressure was 80 mm of Hg and diastolic pressure was unrecordable. Pitting edema leg was demonstrable only on right side. The right lower limb showed diffuse swelling, marked tenderness, and cord like thickened palpable veins. Abdominal examination revealed generalized distension, soft hepatomegaly and splenomegaly of 4 cm and 2 cm below costal margin, respectively. Nervous system examination did not reveal any abnormality except impaired sensorium. Other systems were essentially normal.

Investigations showed a hemoglobin of 8 g/dl, TLC $10.5 \times 10^9/L$ with P_{84} L_{10} E_4 M_2 . Blood culture grew *Salmonella typhi* which were sensitive to furazolidone, gentamicin, ciprofloxacin, ceftriaxone, cefotaxime but resistant to ampicillin, chloramphenicol, cotrimoxazole and amoxicillin. Widal test done on the day of admission showed a titre of 1/400 against 'O' and 'H' antigens of *S. typhi*. Blood urea nitrogen and serum creatinine levels were 50 mg/dl and 2.5 mg/dl, respectively. Urine routine examination and culture study were normal. Skiagram of chest and ECG did not reveal any abnormality. Culture obtained from the clot and abscess also yielded *Salmonella typhi*.

The treatment started included intravenous fluid administration with normal saline, infusion of ciprofloxacin and dopamine. After correction of shock and establishment of adequate urine output within 24 hours, the patient was given aspirin 100 mg orally and intravenous heparin therapy daily. High fever, pitting edema, diffuse swelling of right lower limb subsided within seven days of therapy. However, the swelling over the right calf muscles with low grade fever

was persisting even after the first week of therapy. Incision and drainage of the calf abscess was done. The patient completely recovered gradually within two weeks.

Venous thrombosis was a common complication occurring usually in the fourth week of illness before the antibiotic era(1). Dehydration and prolonged lying in bed were blamed for causing thrombosis, but in some cases *Salmonella typhi* were isolated from the clot(3). The unusual feature of our present case was venous thrombosis as the presenting feature which was followed by localized abscess. The thrombosis was caused directly by *S. typhi*. The accompanying septic shock was another interesting facet of this case. Although well documented in the past, this case report brings to attention varied manifestations of enteric fever.

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REFERENCES

1. Feigin RD. Infections due to *Salmonellae*. In: Nelson Textbook of Pediatrics, 14th edn. Eds. Behrman RE, Kliegman RM, Nelson WE, Vaughan III VC, Philadelphia, WB Saunders Co, 1992, pp 729-734.
2. Huckstep RL. Typhoid fever in children. In: Typhoid fever and other *Salmonella* infections. Ed. Huckstep RL. Edinburgh, E & S Livingstone Ltd, 1962, pp 211-217.
3. Singh S, Singhi S. Cardiovascular complications of enteric fever. Indian Pediatr 1992, 29: 1319-1322.