MEDIBEATS
The Medical Bulletin

In Syndrome

Typhoid Fever

- Typhoid fever is an enteric fever characterized by systemic illness along with abdominal pain and fever in a "step-ladder" pattern.

Etiology:

- The main causative agent of typhoid fever is Salmonella typhi and Salmonella paratyphi, both are members of the Enterobacteriaceae family.
- Salmonella is transmitted by the fecal - oral route through contaminated water, undercooked foods, and fomites of infected patients and is more common in areas with overcrowding, social chaos and poor sanitation.
- It is only transmitted from an infected person to another person, as humans are its only host. Major sources of salmonella are poultry, eggs, and rarely turtles.

Clinical Features:

- Arthralgia is more common.
- Enterocolitis (more prominent in Salmonella typhi) after 12 hours to 48 hours of inoculation. Often, they initially present with nausea, vomiting that progresses to diffuse abdominal pain, bloating, anorexia and diarrhea (around 66%), which can vary from mild to severe diarrhea with or without blood, followed by a short asymptomatic phase that gives way to bacteremia and fever (about 96%) with flu-like symptoms.
- Classic typhoid fever starts about one week after the ingestion of the organism.
- Fever follows a “step-ladder” pattern (i.e., fever rises one day, falls the subsequent morning and continues to form peaks and troughs with insidious onset).
- Abdominal distress.
- Due to the hypertrophy of Payer patches, constipation may predominate over diarrhea in some cases.

Diagnosis:

- Clinical approach.
- Patients residing in areas with poor sanitation or impure drinking water or history of travel from endemic areas.

- Blood culture
- Stool culture
- Bone marrow
- Widal test
- Skin snip test
- Polymerase chain reaction (PCR) Assay
- Enzyme-Linked Immunosorbent Assay (ELISA)

Treatment:

- Antibiotic therapy is the mainstay of treatment. Fluoroquinolones are the most effective drug of choice.
- Ciprofloxacin (500 mg orally twice daily for 5-7 days) is the most effective fluoroquinolone.
- Amoxicillin (750mg orally 4 times daily for about 2 weeks), trimethoprim- sulfamethoxazole (160 mg twice daily for 2 weeks) are all alternative treatments.

Prognosis:

- The overall current mortality rate less than 1%.
- In untreated patients, approximately 10% will relapse and 4% will become chronic carriers.

Dr. C. Naveen Kumar,
Kangayam.