12 Facts about Typhoid Fever

Typhoid fever is a systemic bacterial infection caused by *Salmonella Typhi*, typically transmitted via contaminated food or water. It is characterized by a slow-rising, non-localizing fever without rigors in the early phase.

1. Initial Presentation

- May begin as **sore throat** unresponsive to standard sore throat treatment.
- *S. Typhi* proliferates initially in the lymphoid tissue of the oropharynx and ileum.

2. Fever Pattern

- **Slow rising temperature** due to gradual bacteremia increase.
- Fever escalates over days (e.g., mild on day 2, higher on day 3+).
- Absence of rigors due to slow onset bacteremia.

3. Non-localizing Fever

- Early fever is **non-localizing**, as bacteria circulate in the blood without organ-specific symptoms.
- Localizing signs develop only if infection persists beyond 1–2 weeks.

4. Ileal Involvement

- The ileum acts as a bacterial reservoir, **not initially inflamed**.
- Ileal symptoms (pain, diarrhea, constipation) appear only in late stages (2nd–3rd week).
- Early ileal symptoms suggest other infections (e.g., *Campylobacter*, *Yersinia*, *E. coli*).
- Perforation or obstruction is a late complication, not diarrhea.

5. Diagnostic Tests – Early

- **Blood culture** is the gold standard in the first week.
- Bone marrow culture is highly sensitive but invasive.

6. Diagnostic Tests – Serology

- **Widal test** becomes positive only after the first week; single tests have low specificity.
- Rising antibody titers over 2–3 days are more diagnostic than a single positive test.
- In endemic areas, positive Widal alone is often misleading; treat clinically, not serologically.

7. Diagnostic Tests – Late

- Urine, feces, or bile cultures may be positive in the late second or third week due to bacterial shedding.

8. Disease Duration

- Typhoid is an **acute infection**, unlike tuberculosis.
- Weight loss is minimal or absent.

9. Hematological Effects

- Endotoxins may suppress bone marrow and myocardium, causing **leukopenia** rather than leukocytosis.

10. Skin Manifestations

- Classic rash: **Rose-pink macules**, mainly on the abdomen, rare and often missed in darker skin.

11. Complications

- After 2–3 weeks, complications may develop including:
  - Pneumonia
  - Brain infections (encephalitis, abscess)
  - Bone and joint infections
  - Kidney infections (pyelonephritis)
  - Cholecystitis, hepatitis
  - Abscess formation

12. Neurological Signs

- Altered sensorium (“typhoid state”) can occur without meningitis/encephalitis.
- Focal neurological deficits suggest direct brain involvement.