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INTRODUCTION

- Typhoid fever also known as enteric fever.
- It is potentially fatal, and cause multi systemic illness.
- On proper treatment, it is curable.
- Untreated typhoid fever leads to several complications.

EPIDEMIOLOGY

- It occurs most often in children and young adults between 5 and 19 years old.
- In 2013, it resulted in about 161,000 deaths.
- Populations of Asia
- Africa
- Caribbean islands

ETIOLOGY

- *Salmonella typhi*
- *Salmonella paratyphi*

MODE OF TRANSMISSION

- Contaminated food and beverages
- Sewage contaminated water
- Using contaminated toilets and neglecting hand hygiene

RISK FACTORS

- In low pH (1.5).
- Reduction in gastric acidity.
- Antacids
- Proton pump inhibitors

- H2 receptor blockers
- Gastrectomy
- Achlorhydria

PATHOPHYSIOLOGY

- Presence of salmonella in the gut
- Engulfed by phagocytes (phagocytosis)
- Pass into mucus and combine with macrophages.
- On combining, it attracts T cells and neutrophils
- On activation of T cells and neutrophils, they release inflammatory mediators and causes inflammation.

SYMPTOMS

Usually signs and symptoms begins at 7-14 days after ingestion of bacteria.

- Fever and bradycardia.
- **On 1st week:**
- Abdominal pain
- Constipation
- Dry cough
- Dull frontal headache
- Delirium
- Malaise
- At end of 1st week, appearance of red spots on back and chest of the patient.

- On 2nd week

Signs and symptoms progress

- Splenomegaly

- Bradycardia

- On 3rd week

- Anorexia

- Weight loss

- Conjunctivitis

- Severe Abdominal distention

- Green-yellow liquid diarrhoea (pea soup diarrhoea)

- Peritonitis

- Toxemia

- Pericarditis

- Intestinal hemorrhage

- On 4th week
- Fever
- Mental confusion
- Neurological complications Increased
- weight loss and weakness

COMPLICATIONS

Neuropsychiatric complications

- Disorientation
- Delirium, restlessness
- Facial twitching
- Convulsions
- Stupor
- Obtundation, coma
- Myelitis
- Polyneuropathy

- Spastic paraplegia
- Cranial neuritis
- Depression
- **Respiratory complications**
- Pneumonia
- Ulceration of Pharynx
- **CVS complications**
- Myocarditis
- Pericarditis
- **Hepatobiliary complications**
- Jaundice
- Pancreatitis
- Hepatomegaly

- **Intestinal complications**
- Intestinal hemorrhage
- Intestinal perforation
- **Genitourinary complications**
- Glomerulitis
- Proteinuria
- Nephritic syndrome
- **Hematologic complications**
- Intravascular coagulation

DIAGNOSIS

- **Culture test** from blood, faeces and gastrointestinal secretions.

TREATMENT

- Azithromycin
- Cephalosporin antibiotics:
- Cefixime
- Cefotaxime
- Ceftriaxone
- Ceftazidime
- Cefoperazon
- e Cefbuten
- Cefdinir
- Carbapenem
- s Imipinem
- Meropenem
- Ertapenem