

Bacillary dysentery

TUCOM

Dep. of Medicine

5th year

Dr. Hasan I. Sultan

26-2-2019

Bacillary dysentery (shigellosis)

Learning objectives:

1. Define bacillary dysentery
2. Describe Shigellae
3. Clarify the clinical features of bacillary dysentery
4. Outline the Management and prevention of bacillary dysentery

Bacillary dysentery (shigellosis)

Bacillary dysentery (shigellosis) is an acute infectious colitis that involves predominantly the rectosigmoid colon. Clinically, a disease characterized by diarrhea that is frequently grossly bloody, abdominal cramping, tenesmus, and fever.

Firstly discovered by Japanese microbiologist Shiga in 1897 during a large epidemic dysentery.

Shigellae are Gram-negative rods, closely related to *E. coli*, that invade the colonic mucosa. There are four main groups: *Sh. dysenteriae*, *flexneri*, *boydii* and *sonnei*

Spread may occur via contaminated food or flies, but transmission by unwashed hands after defecation is by far the most important factor.



Clinical features

Incubation period usually 1- 4 days, but may be as long as 8 days.

Disease severity varies from mild *Sh. sonnei* infections to more severe *Sh. Flexneri* infections, while those due to *Sh. dysenteriae* may be *fulminating* and cause death within 48 hours.

In a moderately severe illness, the patient complains of diarrhoea, colicky abdominal pain and tenesmus. Stools are small, contain blood and purulent exudate with little faecal material. Fever, dehydration and weakness occur, with tenderness over the colon.

Arthritis or iritis may occasionally complicate bacillary dysentery (Reiter's syndrome), associated with HLA-B27.

The "gold standard" for the diagnosis of *Shigella* infection remains the isolation and identification of the pathogen from fecal material.

Management and prevention

Oral rehydration therapy or, if diarrhoea is severe, intravenous replacement of water and electrolyte loss is necessary.

Antibiotic therapy with ciprofloxacin (500 mg twice daily for 3 days) is effective. The use of antidiarrhoeal medication should be avoided.

The prevention of faecal contamination of food and the isolation of cases may be difficult. Hand-washing is very important.

Thanks