

Flagella are long tails made of proteins like flagellin with an internal proton pump motor that facilitates bacterial motility.

## Invades GI Tract

### GI Tract

Salmonella bacteria spread via the fecal-oral route; once ingested they colonize the small intestine and invade the body through Peyer's patches located in the terminal ileum. A large amount of Salmonella bacteria must be ingested because stomach acid normally destroys the bacteria.

## Peyer's Patches

### Pirate Patch

Peyer's patches are aggregates of lymphoid tissue in the terminal ileum of the small intestine. Peyer's patches are lined by M cells, which are specialized epithelial cells that endocytose antigens and then present them to other immune cells like T-cell lymphocytes.

## Considerations

## Osteomyelitis in Sickle Cell Patients

### Skeleton-on-fire with Sickle

Due to its encapsulated trait that requires a functional spleen to properly destroy, Salmonella infection is classically associated with osteomyelitis in patients with sickle cell anemia who often have nonfunctional spleens.

## Reactive Arthritis

### Reaction King-Arthur

Some patients develop reactive arthritis after a Salmonella infection. Reactive arthritis consists of the classic triad: uveitis, urethritis, and arthritis. Its clinical manifestations can be remembered by the saying "Can't see, can't pee, can't climb a tree."

## Antibiotics Prolong Fecal Excretion

### ABX-guy causing Prolonged Feces

The use of antibiotics to treat salmonellosis is debated, as antibiotic treatment has been associated with a prolonged carrier state and symptoms. Supportive care is recommended and most infections are self-limiting without antimicrobial use.