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Perspective

Shigellosis: Understanding a common bacterial infection

Catrin Dyse*

Department of Bacteriology, Cape Breton University, Sydney, Canada.

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DESCRIPTION

Shigellosis, also known as bacillary dysentery, is a gastrointestinal infection caused by the bacteria of the genus shigella. This bacterial infection affects millions of people worldwide, particularly in areas with poor sanitation and hygiene practices (Ram et al., 2008). Understanding the nature of the disease, its symptoms, and preventive measures is essential in combating the spread of shigellosis and protecting public health.

Shigella bacteria are highly contagious and can be transmitted through the fecal-oral route. This typically occurs through the ingestion of contaminated food or water, or through direct contact with an infected person. Shigellosis is more prevalent in crowded and unsanitary conditions, such as areas with inadequate sanitation facilities, refugee camps, and daycare centers (Mani et al., 2016).

The symptoms of shigellosis can vary in severity, ranging from mild to severe. Common symptoms include diarrhea, which may be watery or bloody, abdominal pain or cramps, fever, and a sense of urgency to have a bowel movement. In severe cases, shigellosis can lead to dehydration, high fever, and even seizures in young children (Ragupathi et al., 2018). It is important to note that even individuals with mild or no symptoms can still be carriers of the bacteria and spread the infection to others.

Diagnosing shigellosis usually involves laboratory testing of a stool sample to identify the presence of shigella bacteria. Prompt diagnosis is crucial for appropriate treatment and for implementing preventive measures to limit the spread of the infection (Christopher et al., 2010).

The primary goal in treating shigellosis is to alleviate symptoms and prevent complications. Antibiotics, such as azithromycin, ciprofloxacin, or trimethoprim/sulfamethoxazole, are commonly prescribed to shorten the duration of the illness and reduce the severity of symptoms (Baker et al., 2016). Rehydration therapy is also important to prevent dehydration, especially in cases of severe diarrhea.

Preventing shigellosis relies on practicing good hygiene and ensuring proper sanitation. This includes regular hand washing with soap and clean water, particularly after using the toilet and before handling food (Aslam et al., 2018). Proper food preparation and storage, as well as drinking clean and safe water, are essential in preventing contamination. In communities or areas with inadequate sanitation infrastructure, promoting access to clean water sources and implementing hygiene education programs can significantly reduce the incidence of shigellosis (Nelson et al., 2009).

Vaccination against shigellosis is an area of ongoing research. Several vaccine candidates are being developed, but none have yet been widely implemented. Vaccination, if successfully developed, has the potential to play a crucial role in preventing the spread of shigellosis, particularly in high-risk populations (Kahsay et al., 2016).

Shigellosis outbreaks can occur in various settings, including schools, nursing homes, and communities with close living quarters. In such situations, prompt identification of cases, contact tracing, and implementation of infection control measures are necessary to contain the spread. This may include isolating infected individuals, promoting hand hygiene, and disinfecting surfaces and objects that may be contaminated (Butler et al., 1984).

Global efforts to control and prevent shigellosis focus on improving sanitation infrastructure, promoting good hygiene practices, and providing access to clean water sources. Public health interventions, such as health education campaigns and

*Corresponding author. Catrin Dyse, E-mail: catdyse@yahoo.com.

community-based initiatives, are essential in raising awareness and changing behavior to prevent the transmission of the bacteria.

Shigellosis remains a significant public health concern, particularly in areas with limited access to clean water and sanitation facilities. By promoting good hygiene practices, improving sanitation infrastructure, and ensuring prompt diagnosis and appropriate treatment can effectively combat the spread of shigellosis and protect individuals and communities from this bacterial infection (Remuzzi et al., 1995).

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