

Prevention and Treatment of Gastro Infection

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Review Article

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ABSTRACT

Gastroenteritis is inflammation of the lining of the stomach and small and large intestines. Most cases are infectious, although gastroenteritis may occur after ingestion of drugs and chemical toxins (eg, metals, plant substances). Acquisition may be foodborne, waterborne, or via person-to-person spread. In the US, an estimated 1 in 6 people contracts foodborne illness each year. Symptoms include anorexia, nausea, vomiting, diarrhea, and abdominal discomfort. Diagnosis is clinical or by stool culture, although PCR and immunoassays are increasingly used. Treatment is symptomatic, although some parasitic and some bacterial infections require specific anti-infective therapy.

INTRODUCTION

Gastrointestinal infections are the most commonly encountered infections by the environmental and physiological factors. They may not always be severe and may often treat rapidly; they can be serious in specific healthcare settings or patient populations [1, 2].

Gastrointestinal infections may be viral, bacterial or parasitic infections that cause gastroenteritis which is referred as inflammation of the gastrointestinal wall involving both the stomach and intestine. Dehydration or loose motion is the main danger of gastrointestinal infections, so rehydration is important and common. The most gastrointestinal infections are self-limited and resolve within a few days but some time it may persist for long time. New borne Baby or infants and elderly populations and immune-compromised patients are very prone to gastrointestinal infections [3-15].

GI tract infections are very common. In number of cases diarrhoea causes death and in developing countries 2.5 million deaths by diarrhoea. In the United States approximately 211 million cases occurred per year. Pathogens that causing diarrhoea may be transmitted to humans in three basic ways: in food, in water and person to person [16-18].

There are a numbers of microorganisms which causes infection in the gastrointestinal tract [19-69].

Table 1: Microorganism and their infections.

Microorganisms	Symptoms
Adenovirus	It cause diarrhoea, bladder infections, fever, conjunctivitis and rashes, but the respiratory illness is the most common symptom that indicates the person if suffering from Adenovirus infection. After rotavirus, it is the most common cause of peditrics diarrhoea.

Campylobacter	It is transmitted by food such as undercooked meat and contaminated milk or contaminated milk products. It causes bloody diarrhoea, fever, abdominal cramps and vomiting. The campylobacter is one of the most common bacteria which causes gastrointestinal infection in worldwide and is frequent in the children.
<i>Clostridium difficile</i>	It is responsible for diarrhoea associated with antibiotics. Immune-compromised and elderly patients are more prone to infections. The micro-organism clostridium difficile is responsible for 25% of the all diarrhoea.
<i>Escherichia coli</i>	The major cause of diarrhoea is associated with the bacteria Escherichia coli and it also known as E coli. It is transmitted by contaminated water and animal faeces.
<i>Helicobacter pylori</i>	Helicobacter pylori, main cause of duodenal and gastric ulcer. Some time it also causes nausea, stomach pain, and vomiting, peptic ulcer and stomach cancer.
Rotavirus	This virus is responsible for most severe cases of diarrhoea and it mostly causes diarrhoea in children and in infants. The vaccines are available for the rota virus, but globally it causes more than 1/2 million deaths per year in children less than five years old
Salmonella and Shigella	Salmonella is very common and transmitted by the contaminated eggs, seafood, meats, poultry, milk and milk products. It causes acute diarrhoea followed by the headache, abdominal pain, nausea, and fever and vomiting. And the Shigella is frequently transmitted by contaminated food like water polluted with human faeces. The symptom of shigella involves pus or mucus in stool, abdominal cramp and persistent fever.
<i>Staphylococcus aureus</i>	It is associated with the foods including bakery products, meat products, salads, poultry and egg products and dairy products. After incubation period they show their actions like vomiting, diarrhoea, severe nausea and abdomen cramp which may persists for 1-2 days.
<i>Yersinia enterocolitica</i>	It is also known as Y. enterocolitica. They are rarely or infrequent causes diarrhoea. The infectious person has symptoms like abdomen pain, fever and sometimes bloody diarrhoea. They may be spreader by the contaminated food.

TREATMENT / PREVENTION

- If the person is infected by the common types of bacterial gastroenteritis and prevent themselves by dehydration, they can recover within couples of day.
- Drink enough fluids will help you or your child comfortable. The patient can maintain the infection by managing the following think like manage the diarrhoea, control nausea and vomiting, get plenty of rest [70-81].
- If you suffering from severe gastrointestinal infection and unable to eat or drink due to nausea and vomiting, you may need fluids through a vein. This is suitable for young children.
- If you suffering from diarrhoea, do not use any medication which belongs to diuretic class (medicament which increases the excretion of urine) and consult your physician as early as possible [82-90].
- The antibiotics only used in the very severe gastrointestinal infections and not in the common types of bacterial gastroenteritis.
- Some OTC (over the counter) medicines is available in the drugstore which you can buy for slow diarrhoea without any prescription like Kaopectate, Pepto-Bismol etc. [91-95].

- Do not use any medications without consulting with your health provider if you suffering from bloody diarrhoea, fever and severe diarrhoea [96-100].

CONCLUSION

Basically the gastrointestinal infection can be easily treatable. If any person is suffering from the gastrointestinal infection, it can be treated by just taking cure and little attention. The gastrointestinal infection is mainly occurs by consumption of contaminated foods and drinks you just needs to be careful with the quality of drinking water and maintain hygiene. The microorganism which is responsible for the infection is basically transmitted by contaminated by food and water. You can take precaution by avoiding eating of road- side foods because they not maintain proper hygienic conditions during preparing and serving. If anyone feel persistent pain their stomach or bloody stool, go for the check up for the gastrointestinal infection and properly consult with your health care before taking any steps.

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