CHOLERA

Every year, the city witnesses a spate of monsoon related ailments during rainy season. While the civic health department has been claiming to curb the malaria and dengue diseases, there has been a sudden spurt in the gastro and cholera cases this year. Cholera is a waterborne disease. It is each one of our moral and social responsibility to be aware about such water borne monsoon disease and make others alert about the precautions for preventing the disease.

What is Cholera?

Cholera is a diarrheal illness caused by infection with the gram-negative bacterium Vibrio cholerae.

• Bacterial disease

- Spread through contaminated water
- Causes severe diarrhea & dehydration
- Is easily treated
- Left untreated, can cause death in few hours
- Death results from severe dehydration that can be prevented with a simple and inexpensive rehydration solution.



Cholera is characterized by severe, watery diarrhea, which can lead to dehydration and death in few hours in untreated patients.



How is cholera caused?

It is caused by the bacteria Vibrio cholera which has a short incubation period of two hours to five days.

Vibrio Cholerae is:

 Killed within 30 mins by heating at 56 degree C
Killed within a few seconds by boiling
Easily destroyed by disinfectants such as cresol or Bleaching powder (kills vibros instantly at 6 mg/l)
destroyed in an acidity of pH 5 or lower

They remain in ice for 4 to 6 weeks or longer.

What are the signs & symptoms of Cholera?

About 75% of people infected with V. cholerae do not develop any symptoms, although the bacteria are present in their faeces for 7–14 days after infection and are shed back into the environment, potentially infecting other people. Symptoms include:

- 1. Severe watery diarrhea (Diarrhea due to cholera often has a pale, milky appearance that resembles water in which rice has been rinsed)
- 2. Nausea & Vomiting
- 3. Abdominal Cramps
- 4. Headache
- 5. Dehydration (Signs and symptoms of cholera dehydration include irritability, lethargy, sunken eyes, a dry mouth, extreme thirst, dry skin that's slow to bounce back when pinched into a fold, little or no urine output, low blood pressure, and an irregular heartbeat)

How is cholera treated?

Cholera is an easily treatable disease. Prompt correct treatment reduces mortality to less than 1%.

- 1. **Resuscitation:** The basis of treatment is the replacement of lost fluid. This may be done orally if not very severe or if there is no access to facilities for IV replacement but the latter is required in severe fluid loss. Up to 80% of people can be treated successfully through prompt administration of oral rehydration salts.
- 2. Antibiotics: Antibiotics should be considered in severe cases of dehydration & should be given as soon as vomiting has stopped. Tetracycline, doxycycline or ciprofloxacin are often used. They reduce the rate of stool output and this shortens the duration of hospital stay, stops excretion of vibrio in the stool and minimizes the requirement of fluids. Mass administration of antibiotics is not recommended, as it has no effect on the spread of cholera and contributes to increasing antimicrobial resistance.

No other medications, antispasmotics, antidiarrhoeal are required. If diarrhoea persists after 48 hours of treatment resistance to antibiotics should be suspected & antibiotics are to be prescribed accordingly.

How can Cholera be prevented?

- Drink only water that you have boiled, or that you have treated with chlorine or iodine.
- Other safe beverages include tea and coffee made with boiled water, and carbonated, bottled beverages with no ice.
- Make sure that all vegetables are cooked, and avoid salads.



- Eat only foods that have been thoroughly cooked and are still hot, or fruit that you have peeled yourself.
- Avoid undercooked or raw fish or shellfish,
- Avoid foods and beverages from street vendors.
- Wash your hands often with soap and clean water.
- If no water and soap are available, use an alcohol-based hand cleaner (with at least 60% alcohol).
- Clean your hands especially before you eat or prepare food and after using the bathroom.

Reference:

- 1. http://www.maha-arogya.gov.in
- 2. <u>http://www.who.int/cholera/</u>
- 3. www.cdc.gov

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