Most Common **Monsoon Diseases**, Their Treatment & Prevention

There's finally some respite from the scorching heat. It's time for the colourful umbrellas, waterproof bags and raincoats to come out of the closet.

Monsoon is the season, with the first splash of water, we really find ourselves refreshed during the day when the monsoon starts. We all would like to jump in rain as and when we get a view of it. Teen age individuals and kids are more than happy to see rain and explore the splashes of rain, different types of snacks and tasty foods are consumed by people but, while enjoying the rainy days, this picture perfect situation goes out of the window as soon as you step out.

Every monsoon season, the risk of catching various diseases is extremely high due to unhygienic conditions and not adhering to basic preventive measures. Many of these monsoon diseases remain undiagnosed until they progress to undesirable complications. This is why early diagnosis and treatment of diseases in rainy season is important making the difference between life and death. Here are some common diseases which are highly prevalent during this season that you should be aware about.

It is also advisable to understand the preventive measures of these diseases and precautions that you and your family can take as well.

**Influenza (Cold and Flu):**

Common cold is one of the most commonly occurring health sickness during the monsoon season in India. It is highly contagious disease due to the spread of virus in the air which infects the upper respiratory tract and thus affects the nose and the throat. Symptoms involve runny or stuffy nose, body ache, throat irritation and soreness and fever. It is always advisable to consult a physician and get the required medicines prescribed for getting cured from the infection.

The best way to prevent common cold is to have a healthy, balanced and nutritious diet regular which will develop the immune system of the body and improves the body resistance.

**Cholera:**

Another most common and deadly bacterial disease that spreads during monsoon is “cholera” This disease is caused by contaminated food and water and also poor hygienic conditions. Common symptoms of cholera are severe diarrhoea with watery stool 'rice water stools” and vomiting which causes immediate water loss and muscle cramps. Diarrhoea can be so severe that it leads within hours to severe dehydration and electrolyte imbalance. A rapid dipstick test is available to determine the presence of V. cholera bacteria from stool sample.

Cholera requires immediate treatment because the disease can cause death within hours. The goal is to replace lost fluids and electrolytes using a simple rehydration solution, oral rehydration salts (ORS). The ORS solution is available as a powder that can be reconstituted in boiled or bottled water. Antibiotics are not a necessary part of cholera treatment.
Preventive measures include providing clean drinking water, better sanitation, and better hand washing.

**Typhoid:**

“Typhoid” is another waterborne bacterial infection caused by bacteria called Salmonella, due to which ulcers are formed in the intestine which results in fever. This disease is caused by contaminated food or drinking food or water contaminated with the faeces of an infected person. Diagnosis is made by any blood, bone marrow or stool cultures and with the Widal test.

Yes, it would be wise to skip the pani puri and samosas from those much loved, but scarcely unhygienic roadside eateries, to keep away from the scariest of the rainy season diseases.

Symptoms of the diseases are prolonged high fever, severe abdomen pain, headache; vomits are common symptoms of this disease. The worst part is that the infection of this disease can remain in the gall bladder of the patient even after he/she is cured.

Preventive measures include providing clean drinking water, better sanitation, and better hand washing.

Highly infectious & communicable disease that spreads through contaminated food and water during the monsoon season. Poor hygiene and sanitation is the main cause of Typhoid Fever. Common symptoms are fever, headache, sore throat & abdominal pain. The tests which can be done for typhoid are Blood Culture, Rapid Typhoid and Widal.

**Hepatitis A:**

Hepatitis A is a highly contagious liver infection caused by the hepatitis A virus. It is a waterborne viral infection is generally caused by contaminated drinking water or food with the stool of someone with the virus, it can spread through flies. Eating fruits, vegetables, or other foods that were contaminated during handling can cause spread of infection. The symptom of this disease is directly related to the inflammation of the liver that's caused by a virus.

Symptoms include, Jaundice (yellow eyes and skin, dark urine), stomach pain, Loss of appetite, Nausea, Fever, Diarrhoea and Fatigue. Blood tests are used to detect the presence of hepatitis A in your body.

No specific treatment exists for hepatitis A. In most cases of hepatitis A, the liver heals within six months with no lasting damage. Management involves, Rest, treatment of nausea and rest to liver.

Practicing good hygiene, including washing hands frequently, is one of the best ways to protect against hepatitis A. Vaccines are available for people most at risk.

**Dengue:**

Dengue fever is a disease caused by a family of viruses that are transmitted by mosquitoes. It is spread by what’s known as the tiger mosquito (Aedes Aegypti), which has black and white stripes and typically bites early in the morning or at dawn. Dengue goes by other names, including “break bone fever.”

Symptoms of dengue fever include severe joint and muscle pain, swollen lymph nodes, headache, fever, exhaustion, and rash. Complication of dengue fever is called Dengue haemorrhagic fever (DHF). It is a specific syndrome that tends to affect children under 10 years of age. This complication of dengue causes abdominal pain, haemorrhage (bleeding), and circulatory collapse (shock).

There are no specific antibiotics or antiviral medication to treat it. For typical dengue, the treatment is concerned with relief of the symptoms and signs. Rest and fluid intake (oral rehydration) are important. Pain relievers such as aspirin and nonsteroidal anti-inflammatory drugs should only be taken under a doctor’s supervision because of the possibility of worsening bleeding complications. Pain killers can be given for headache and for joint and muscle pain (myalgia). Platelet count should be monitored through the course of the illness. Sometimes hospitalization for dengue maybe advised depending upon the patient’s condition receive IV fluids.

It is a mosquito-borne disease; symptoms include high grade fever, rash & headache. The control measure of Dengue Fever requires elimination of mosquito breeding places. The tests which can be done are CBC, Dengue NS1 Antigen and Dengue IgM.

**Preventive measures**

- As it’s transmitted via mosquitoes, one should wear a strong insect repellent containing DEET to prevent getting bitten.

- People should also wear full sleeve clothing when out in the day.

- It is important to remember that the dengue mosquito usually bites only in the day time and breeds in clean, fresh water. So any water accumulation should be avoided.
Malaria:

One of the most common monsoon-related diseases, malaria, is caused by certain species of mosquitoes breeding in the dirty water. Since, there is a problem of water logging during the rainy season, mosquitoes get conducive conditions to breed. This disease is spread by Female Anopheles mosquito. Most deaths are caused by P. falciparum and is the most dangerous type of malaria also known as cerebral malaria. Other forms of malaria are P. vivax, P. ovale, and P. malariae.

Malaria is typically diagnosed by the microscopic examination of blood using blood films, or with antigen-based rapid diagnostic tests.

It is characterized by fever, body ache, chills, and sweating. If untreated, it can lead to complications like jaundice, severe anemia or even liver and kidney failure. Malaria is treated with antimalarial medications successfully.

Maximum cases of Malarial Fever are seen in monsoons. Mosquitoes are responsible for transmission. Rain provides opportunities for the breeding of mosquitoes in water-logged areas. Symptoms range from mild to severe, like fever with chills, headache, jaundice, severe exhaustion, and fluctuating state of consciousness. The tests which can be done are Malarial Parasite (MP) Smear and Malarial Parasite (MP) Antigen.

Preventive measures –

- Take an antimalarial drug as a precautionary measure in mosquito prone areas.
- Also take measures to prevent mosquito bites such as wearing full sleeve clothing.
- Application of antirepellant mosquito creams and Electronic mosquito repellent devices can be used during the monsoon season to avoid mosquito’s at home.
- Accumulation of dirty water must be kept in check to prevent malaria mosquito breeding.
- Insecticide-treated mosquito nets (ITNs) and indoor residual spraying (IRS) have been shown to be highly effective in preventing malaria in your neighbourhood and can reduce breeding of mosquitoes also.

Viral fever:

Any fever due to virus is termed as VIRAL. Sudden weather change often causes viral fever characterized by fatigue, chills, body aches and fever. The illness is contagious and spreads through infection droplets in the air or by coming into physical contact with infected secretions. General duration of a viral fever lasts from 3 to 7 days, with the severity of the fever being the highest in the first three days.

The general treatment if side effects and symptoms using OTC drugs in consultation with their doctor, antihistamines, decongestants and antipyretic drugs are usually recommended, Viral disease are generally self-limiting and generally do not need antibiotic unless there is a secondary infection.

Some Preventive measures –

- One must ensure that they do not get wet in the rain or stay in wet clothes for a long period
- Wash their hands often,
- Boost their immunity by eating Vitamin C rich foods and green leafy vegetables. They must also keep a distance from an infected person.

Gastroenteritis:

Gastroenteritis and food poisoning are quite common during the monsoon season, and the high humidity helps in the growth of disease-causing bacteria. The general symptoms of gastroenteritis are stomach cramps, nausea, vomiting or diarrhoea. Fever can develop and one may feel sense of malaise and weakness through the course of the illness.

It is very important that you keep yourself hydrated at all times and bland diet is recommended such as rice, curds, fruits such as banana, apple. Rice kanji water or coconut water is also good line of treatment for hydration. ORS is generally recommended. Course of treatment is mainly to prevent dehydration, control fever. Antibiotics are prescribed after evaluation of the condition of the patient. Antiprotozoal can also be prescribed accordingly.
Preventive measures:

- Try and avoid eating raw food like salads because it is difficult to ascertain whether they have been washed, cleaned and stored at the right temperature.
- Avoid roadside food which may be made in contaminated water and trigger diarrhoea.

Prevention is better than cure:

Some measures to ensure that monsoons become an enjoyable experience without hampering health.

“One must drink only clean water and use boiled water or water purifiers.
" One should change their hand towels after a day's use.
" One should cover their mouth and nose with a handkerchief while coughing or sneezing.
" Use mosquito repellents and nets (dengue transmitting mosquitoes usually bite during day time; either early morning or late evening).
" One should keep their wet and soggy clothes or shoes away from dry garments.
" Avoid eating out and consume as much fresh food as possible.
" Drink warm water every two hours and carry home-boiled water while travelling.
" Avoid visiting crowded places such as theatres or exhibitions.
" Use hand sanitizers while travelling.
" Cover your nose while travelling on a bike/while seated next to the window in a bus or train.
" Avoid getting wet in the rain.

To keep in mind: Avoid self-medication with antibiotics. Though it is highly contagious, the chances of it turning life-threatening are quite rare. If symptoms are severe or long lasting, visit your doctor to rule out any bacterial infection. Flu vaccines can often prove useful and one needs to take a booster every year.

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