CONDITION

Viral gastroenteritis

Viral gastroenteritis is an infection of the stomach and intestines that causes vomiting, watery diarrhea, and cramps.

WHAT IT IS
Viral inflammation of the stomach and intestines

BODY SYSTEM
Digestive system

MAIN SYMPTOMS
Watery diarrhea, vomiting, nausea, stomach cramps

WHAT CAUSES IT
Infection with viruses, often norovirus or rotavirus

HOW IT IS DIAGNOSED
Clinical assessment; stool testing can identify the virus

MAIN TREATMENT
Fluids and symptom relief

CAN IT BE CURED?
Yes, usually clears without specific treatment

IS IT AN EMERGENCY?
Sometimes, when severe dehydration causes confusion or fainting

LONG-TERM OUTLOOK
Most people recover fully within several days

Overview

Viral gastroenteritis is an infection that irritates the stomach and intestines. It usually causes sudden watery diarrhea, vomiting, nausea, and stomach cramps.

It is often called "stomach flu," but it is not influenza. Influenza mainly affects the nose, throat, and lungs. Several different viruses can cause gastroenteritis, including norovirus and rotavirus.

Most people recover without specific medical treatment. The main concern is dehydration, which means losing more water and body salts than you replace. Babies, young children, older adults, and people with weakened immune systems can become dehydrated more quickly.

Viral gastroenteritis spreads easily. It can pass through close contact, contaminated food or

water, or surfaces touched by someone carrying the virus. Careful hygiene helps protect other people while you recover.

Symptoms

Symptoms often begin suddenly. The exact pattern and length depend on the virus and your general health.

Common symptoms include:

Vomiting may improve before the diarrhea does. Some people have only diarrhea or only vomiting.

Blood in the stool is not typical of uncomplicated viral gastroenteritis. Severe or steadily worsening abdominal pain is also unusual. These symptoms can have other causes and need medical assessment.

Dehydration can cause a dry mouth, strong thirst, dark urine, urinating less often, weakness, or dizziness when standing. A dehydrated baby may have fewer wet diapers, no tears when crying, a dry mouth, or unusual sleepiness.

- Watery diarrhea without blood
- Nausea or vomiting
- Stomach pain or cramps
- Mild fever, headache, or body aches
- Reduced appetite and tiredness

Causes and risk factors

Norovirus is a common cause in people of all ages. It often spreads rapidly in households and shared settings such as schools, hospitals, care homes, restaurants, and cruise ships.

Rotavirus mainly affects babies and young children, although adults can also become infected. Vaccination has reduced severe rotavirus illness in countries with routine infant vaccination. Other causes include sapovirus, astrovirus, and certain adenoviruses.

The virus can spread when tiny particles of stool or vomit enter another person's mouth. This may happen through unwashed hands, contaminated food or water, or objects such as taps, toilets, phones, and door handles. Vomiting can also scatter small droplets onto nearby surfaces.

Your chance of catching viral gastroenteritis is higher if you live with someone who has it, care for someone who is ill, handle contaminated food, or spend time in a setting where an outbreak is happening.

People at greater risk of complications include young children, older adults, pregnant people, and those with kidney problems, inflammatory bowel conditions, or weakened immune systems.

Diagnosis

Viral gastroenteritis is usually diagnosed from your symptoms, medical history, and an examination. A clinician may ask when the illness began, whether anyone around you is sick, whether you have travelled, and whether there is blood in your stool.

Testing is not always needed when symptoms are mild and improving as expected. If the illness is severe, prolonged, part of an outbreak, or difficult to distinguish from another infection, a stool sample may be tested. Laboratory tests can identify viral genetic material or viral proteins.

Blood tests do not usually confirm viral gastroenteritis. They may be used to check for dehydration, kidney strain, or abnormal levels of body salts.

Other conditions can cause similar symptoms. These include bacterial food poisoning, medication side effects, appendicitis, inflammatory bowel conditions, and other abdominal problems. The pattern of symptoms alone cannot always identify the cause.

Treatment and management

There is usually no medicine that removes the virus. Treatment focuses on replacing fluids and easing symptoms while your immune system clears the infection.

Take frequent small sips if drinking a full glass triggers vomiting. An oral rehydration solution contains water, sugar, and salts in proportions designed to replace what is lost through diarrhea and vomiting. It may be especially useful for children, older adults, or anyone showing early signs of dehydration.

Breastfeeding can usually continue. Babies taking formula should generally continue their usual feeds unless a healthcare professional advises otherwise. Sugary drinks, undiluted juice, and fizzy drinks are not good substitutes for oral rehydration solution, especially for children.

Eat when you feel able. There is usually no need for a strict "bland food" diet. Small amounts of

familiar foods may be easier at first. Avoid alcohol while you are dehydrated or recovering.

Antibiotics like amoxicillin or doxycycline do not work against viruses. Some adults may be able to use over-the-counter medicines for diarrhea or nausea, but these are not suitable for everyone. Ask a pharmacist or clinician before using them if you are pregnant, take other medicines, have another health condition, or have fever or blood in your stool. Anti-diarrheal medicines may be unsafe for young children.

A clinician may prescribe medicine for severe nausea or vomiting. Hospital treatment may be needed if dehydration cannot be corrected by drinking. Fluids can then be given through a vein.

Complications

Dehydration is the most common complication. Severe fluid loss can disturb body salts, lower blood pressure, and place strain on the kidneys. Young children and frail older adults may worsen quickly.

Temporary difficulty digesting lactose, the natural sugar in milk, can occur after the intestinal lining has been irritated. This is more common in children and may cause extra gas, bloating, or loose stools for a short time.

Some people develop lingering bowel sensitivity after an infection. Ongoing diarrhea, weight loss, blood in the stool, or persistent pain should not simply be assumed to be part of recovery.

Prevention

Not every case can be prevented, and there is no vaccine covering all viruses that cause gastroenteritis. Routine infant rotavirus vaccination helps prevent severe illness caused by rotavirus.

Wash your hands thoroughly with soap and water after using the toilet or changing a diaper, and before preparing or eating food. Alcohol-based hand sanitizer can be useful in some situations, but it does not work as well as soap and water against norovirus.

To reduce spread:

Follow cleaning-product instructions carefully. Wear disposable gloves when cleaning stool or vomit, and wash your hands afterward.

Food safety also matters. Wash produce, cook shellfish thoroughly, and avoid preparing food for others when you have recently had vomiting or diarrhea.

- Do not prepare food or care for others while sick
- Wait at least 48 hours after symptoms stop before handling food for others
- Clean contaminated surfaces promptly with a product effective against norovirus
- Wash soiled clothes and bedding without shaking them
- Do not share towels, utensils, or drinking containers during the illness

Living with it and what to expect

Viral gastroenteritis is usually a short-term illness. Vomiting often settles first, while loose stools, reduced appetite, and tiredness may continue for several more days. Recovery can take longer after a severe infection or significant dehydration.

Most people return to their usual health without lasting digestive damage. Appetite may come back gradually. Some foods, particularly rich meals or dairy products, may temporarily make symptoms more noticeable.

Stay home while vomiting or having diarrhea. Follow local school, workplace, or public health rules about returning. Food handlers, healthcare workers, and people who care for vulnerable individuals may need to stay away longer because they could pass the virus to others.

You can have viral gastroenteritis more than once. Many viruses can cause it, and protection after one infection may be incomplete or short-lived.

Arrange routine follow-up if your digestion does not return toward normal after the main illness, or if loose stools, food intolerance, or fatigue continue. Persistent symptoms may need assessment for another cause.

When to get medical help

Seek urgent medical advice if you or someone you care for cannot keep fluids down, is urinating much less than usual, or has clear signs of dehydration. Young babies, frail older adults, and people with weakened immune systems should be assessed sooner because they have less reserve.

Urgent assessment is also appropriate for:

Get emergency help for confusion, fainting, difficulty waking, severe weakness, or very little to no urine. These can be signs of severe dehydration.

Vomiting blood, material that looks like coffee grounds, or bright green fluid also needs

emergency assessment. Sudden severe abdominal pain, a rigid or swollen abdomen, or trouble breathing may point to another serious problem rather than uncomplicated viral gastroenteritis.

Routine medical follow-up is different from emergency care. It is reasonable to arrange a non-urgent appointment for bowel changes that linger after recovery, repeated episodes, or concerns about nutrition and weight.

- Blood, pus, or black coloring in the stool
- Frequent vomiting that prevents drinking
- High or persistent fever
- Severe or worsening abdominal pain
- Diarrhea that is not beginning to improve
- Symptoms after recent foreign travel, hospitalization, or antibiotic treatment
- A baby with repeated vomiting, diarrhea, or fewer wet diapers

Common questions

How long does viral gastroenteritis last?

Many cases improve within a few days, although diarrhea and tiredness can last longer than vomiting. The duration depends on the virus, the amount of fluid lost, and your general health. Symptoms that are worsening rather than improving should be assessed.

How long am I contagious?

You are most likely to spread the virus while you have vomiting or diarrhea and during the first days after symptoms stop. Some viruses can remain in stool for longer. Careful handwashing remains important after you feel better.

What should I eat with stomach flu?

Eat small amounts when you feel ready. Soup, rice, bread, potatoes, cereal, fruit, vegetables, and other familiar foods may be tolerated. A strict diet is not usually necessary. Fluids are more important than solid food during active vomiting.

Is viral gastroenteritis the same as food poisoning?

Not exactly. Food poisoning describes illness caused by contaminated food and may involve viruses, bacteria, parasites, or toxins. Norovirus can spread through food, so some cases of "food poisoning" are viral gastroenteritis. Symptoms alone may not reveal the exact cause.

Can I catch stomach flu again?

Yes. Several viruses cause gastroenteritis, and each has different strains. Immunity after infection may not be complete or permanent. Hygiene and rotavirus vaccination for infants reduce risk but cannot prevent every case.

Should I take antibiotics?

Antibiotics do not treat viral gastroenteritis. They are used only when a clinician identifies or strongly suspects a bacterial infection that is likely to benefit from them. Unnecessary antibiotics can cause side effects and may make some infections harder to treat.

Sources

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