



Norovirus: Sydney 2012

In late 2012, there was a global increase in norovirus notifications (acute viral gastroenteritis).¹ It is thought that this is due to the spread of a novel norovirus, referred to as Sydney 2012. A worldwide warning for a severe norovirus season in 2013 has been issued, and outbreaks of Sydney 2012 have already been reported in New Zealand. Treating dehydration and reporting of suspected outbreaks are key aspects of management.

Diagnosis and management of suspected norovirus

The typical incubation period for norovirus is 24 – 48 hours. Acute onset of nausea is often the first symptom, accompanied by abdominal cramps and watery diarrhoea. Vomiting can occur, and may be more common in young people, while diarrhoea may be more common in adults.² Patients can also experience a mild fever, headache, fatigue and myalgia. Norovirus infections are self-limiting and symptoms typically resolve in one to two days. Dehydration is the most common complication of the illness.

The purpose of the clinical examination is to assess the degree of dehydration and to exclude other possible causes. Details of stool and vomitus frequency and consistency should be noted. The patient's recent history of fluid intake, urine output, and the use of medicines that may cause diarrhoea, as well as any recent overseas travel, should also be enquired about. Routine examination should include an assessment of the patient's general appearance, temperature, heart rate and blood pressure, respiratory rate and character, skin turgor and capillary refill time.

Diarrhoea and vomiting are non-specific symptoms in younger children. Red flags which may indicate a condition other than viral gastroenteritis, include high fever, symptoms related to other systems, prolonged symptoms and severe abdominal pain or bilious vomiting.³

Most patients with norovirus can be managed at home, however, referral to hospital may be considered for patients with severe dehydration, older patients who are unable to manage at home by themselves or younger infants whose condition may deteriorate more rapidly. Patients with gastroenteritis, who have impaired kidney function or who have had a previous episode of acute renal decline, should discontinue non-essential, nephrotoxic medicines, e.g. NSAIDs. Consider withholding ACE inhibitors, ARBs and diuretics in older patients with gastroenteritis if dehydration does occur.

 For further information see: "Assessment and management of infectious gastroenteritis": BPJ 25 (Dec, 2009).

Laboratory investigations are not routinely required for patients with suspected norovirus.

Anti-diarrhoea or anti-emetic medicines are not generally recommended as they may deter the use of appropriate fluid treatment, can prolong symptoms and are associated with other adverse effects.³ In adults with severe vomiting, a single dose of an antiemetic (IM or buccally) may give symptomatic relief, and enable oral rehydration to occur.

Reporting norovirus outbreaks

Acute gastroenteritis is a notifiable infectious disease when there are two or more people with a suspected common source, or a single person in a high risk area, e.g. a food-handler.

 **Best Practice Tip:** If your practice sees, or hears of, an unusual number of patients with gastroenteritis in a week, even if no common source or high risk area is identified, contact your local Medical Officer of Health. They will then determine if further investigation and outbreak reporting is needed.

Infection control of norovirus

Patients with suspected norovirus should be advised to stay at home until they have been symptom-free for at least 48 hours. Food handlers are a particularly common vector for norovirus

transmission and one infected person can result in an outbreak infecting thousands of people.⁴

Effective hand hygiene is the most important measure for preventing the spread of norovirus.² All people who may have come into contact with an infected person should be instructed to regularly wash their hands under running water and vigorously rub with soap for a minimum of 20 seconds. Hands should be thoroughly dried with a hand drier or disposable towel to minimise the transfer of pathogens.² Alcohol-based gels can be used where the use of soap and water is impractical, but should not be routinely used as a replacement for thorough hand washing.³

For infection control in the general practice surgery after seeing a patient with suspected norovirus, use a bleach solution (0.1% sodium hypochlorite) to disinfect contaminated surfaces, after regular cleaning.² Quaternary ammonium and phenolic disinfectants do not have sufficient activity against norovirus due to its structure.²

 For further information see: Ministry of Health guidelines for the management of norovirus outbreaks, available from: www.health.govt.nz (key word = norovirus).

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References

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