

ALERT FOR INFECTIOUS DISEASE CLINICIANS AND CLINICAL MICROBIOLOGISTS ACUTE HEPATITIS OF UNKNOWN AETIOLOGY IN CHILDREN

KEY POINTS

- An increase of acute hepatitis cases of unknown aetiology in children aged 16
 years and younger has been reported overseas. No cases have been reported
 in Australia to date.
- If a child presents with jaundice following gastroenteritis, collect a blood sample requesting acute viral hepatitis serology and liver function tests.
 Where a classical hepatitis virus (A-E) is not detected, test whole blood, an upper respiratory swab, and stools for adenoviruses by PCR.
- If you suspect acute hepatitis of unknown aetiology in a child, please consult a
 paediatric infectious disease specialist/gastroenterologist and notify the
 Communicable Disease Control Directorate (2 9222 0255 or A/H: 9328 0553).

Background

- There have been reports, from Europe primarily, of an unusually high number of acute hepatitis cases of unknown aetiology among children aged 16 years and younger.
- The clinical syndrome is of severe acute hepatitis with markedly elevated transaminases (ALT > 500 U/L), often with jaundice, sometimes preceded by gastrointestinal symptoms with vomiting as a prominent feature.
- Globally, 169 cases have been reported from 11 countries in the six months from October 2021 to 21 April 2022. No cases have been reported in Australia.
- The majority of cases have been in children under 5 years old.
- Seventeen children (approximately 10%) have required liver transplantation; one death has been reported.
- Common viruses causing acute viral hepatitis (hepatitis viruses A- E) have not been detected. A high proportion of cases (75% in the UK) have tested positive for adenovirus, suggesting potential links to adenovirus infection, but other causes have not been ruled out. There is no established link to COVID-19 or the COVID-19 vaccine.

Management of suspected acute viral hepatitis of unknown aetiology

- Children presenting with jaundice following gastroenteritis should be tested for causes
 of acute viral hepatitis (hepatitis viruses A, B, C, D and E), liver function tests,
 adenoviruses, and SARS-CoV-2. Other possible causes include CMV, EBV, HSV,
 HHV6 and enterovirus.
- Consult a paediatric infectious disease physician or gastroenterologist if a case of acute hepatitis of unknown aetiology is suspected.
- Health staff involved in the care of these children should use standard infection
 prevention and control precautions, with optimal placement in a single room while the
 patient is considered infectious and until resolution of symptoms.
- Follow general treatment recommendations for patients presenting with hepatic illness, including symptom management and supportive care.

Notification

If a child aged 16 years or under is suspected to have an acute viral hepatitis of unknown or unusual aetiology (e.g. adenovirus), please notify the Communicable Disease Control Directorate as soon as practicable (phone 9222 0255 or A/H: 9328 0553).

A/DIRECTOR, COMMUNICABLE DISEASE CONTROL DIRECTORATE DEPARTMENT OF HEALTH WESTERN AUSTRALIA