

ACUTE HEPATITIS OF UNKNOWN AETIOLOGY IN CHILDREN

Key points:

1. A multi-country increase of acute hepatitis of unknown aetiology in children has been reported. No cases have been identified in Australia.
2. Where a child presents with jaundice, collect blood for liver function tests and hepatitis serology, and appropriate samples for adenovirus testing.
3. If you suspect acute viral hepatitis of unknown aetiology in a child, consult a gastroenterology and ID specialist and notify your local Public Health Unit on 1300 066 055 or via fax.

What is the issue?

- Globally, 169 cases of acute viral hepatitis of unknown aetiology have been reported from October 2021 to 21 April 2022. Cases are reported across 12 countries, primarily in Europe. No cases have been identified in Australia.
- Cases are predominantly children under 5 years of age with initial symptoms of gastroenteritis (diarrhoea and nausea) followed by the onset of jaundice and elevated liver enzymes.
- Seventeen children (~10%) have required liver transplantation after developing acute liver failure; at least one death has been reported.
- Common viruses causing acute viral hepatitis (hepatitis viruses A-E) and other causes (medications, toxins, other medical conditions) have not been detected.
- Human adenovirus was detected in a high proportion of cases (75% in the UK) suggesting a potential causative pathogen, but investigations are ongoing. A small subset of cases had SARS-CoV-2 co-infection, but the role of this virus is unclear. There is no link to coronavirus (COVID-19) vaccines.

Management of suspected acute viral hepatitis of unknown aetiology

- Clinicians are asked to be aware of potential new cases of acute hepatitis in children.
- Children with jaundice should have liver function testing performed, and where biochemical hepatitis is evident, they should be tested for causes of acute viral hepatitis including hepatitis viruses A, B, C and E, Epstein-Barr virus (EBV), cytomegalovirus (CMV), and adenovirus. Testing for concurrent SARS-CoV2 infection should also be undertaken.
- For adenovirus testing collect blood, stool, and respiratory tract samples (oropharyngeal, deep nasal, nasopharyngeal and throat swabs, or aspirates).
- If acute viral hepatitis of unknown aetiology in a child aged 16 years or less is suspected consult specialists in gastroenterology and infectious diseases and notify your local Public Health Unit on 1300 066 055 or via fax.
- All staff involved in the care of these children should use standard and contact IPC precautions with optimal placement in a single room whilst the patient is considered infectious and until resolution of symptoms. Follow protocols that would normally apply in the investigation of acute hepatitis and handling of specimens.
- General treatment recommendations for patients presenting with hepatic illness should be followed including symptom management and supportive care.

Further information

- Please contact your local Public Health Unit on 1300 066 055.
- Further information on the global situation: <https://www.who.int/emergencies/disease-outbreak-news/item/2022-DON376>



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28 April 2022