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Acute hepatitis of unknown aetiology in children

Information for GPs and hospital clinicians in the ACT

Key Points

- An increase of acute hepatitis of unknown aetiology in children aged 16 years and younger has been reported in several countries. No cases have been identified in Australia.
- Where a child presents with jaundice following gastroenteritis, test for liver function and causes of acute viral hepatitis.
- If you suspect acute viral hepatitis of unknown aetiology, you are required to notify ACT Health Communicable Disease Control (see contact details under "Further Information").

What is the issue?

- Globally, 169 cases of acute viral hepatitis of unknown aetiology have been reported in children aged 16 years and younger from October 2021 to 21 April 2022. Cases are reported across 11 countries, primarily in Europe. To date, no cases have been identified in Australia.
- Cases are predominantly in children under 5 years old who showed initial symptoms of gastroenteritis (diarrhoea and nausea) followed by the onset of jaundice and elevated liver enzymes (ALT and/or AST >500 IU/L in many cases).
- Of the 169 cases identified as of 21 April 2022, seventeen children (approximately 10%) have required liver transplantation; at least one death has been reported.
- Common viruses that cause acute viral hepatitis (hepatitis viruses A- E) have not been detected.
- A high proportion of cases tested for adenovirus have detected adenovirus (75% in the UK), suggesting potential links to adenovirus infection. However, other causes have not been ruled out.
- There is no link to coronavirus (COVID-19) vaccines.

Management of suspected acute viral hepatitis of unknown aetiology

- Be aware of potential new cases of acute hepatitis in children aged 16 years and younger.
- Children with jaundice following gastroenteritis should have liver function testing and be investigated for causes of acute viral hepatitis.
- The following tests are recommended (please note on pathology form that these are for investigation of hepatitis of unknown origin):

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- Blood (serum): Hepatitis A IgM/IgG, Hepatitis B sAg (if HBV sAg detected then test for HBV cAb and Hepatitis D Ab), Hepatitis C Ab, Hepatitis E IgM/IgG, CMV IgM/IgG, EBV IgM/IgG.
- Blood (EDTA): collect and store for nucleic acid testing if required following other results and specialist review.
- Respiratory tract swab SARS-CoV-2 and extended viral respiratory panel PCR (includes enterovirus and adenovirus)
- o Stool: MCS, bacterial and viral PCR panel (includes adenovirus).
- "Hepatitis infectious, not otherwise specified" is a notifiable condition in the ACT, in addition to hepatitis A, B, C, D and E infections.
- If acute viral hepatitis of unknown aetiology is suspected you are <u>required to notify ACT Health</u> (see contact details below).
- All staff involved in the care of these children should use standard infection prevention and control precautions. Admitted patients should be cared for in a single ensuite room while the patient is considered infectious (until resolution of any gastroenteritis symptoms). Follow protocols that would normally apply in the investigation of acute hepatitis and handling of specimens.
- General management recommendations for patients presenting with hepatic illness should be followed including appropriate investigations, symptom management and supportive care.
- Given the severity of cases seen internationally, there should be a low threshold for tertiary referral for children who are clinically unwell.
- General practitioners in the ACT and surrounding regions can seek urgent clinical paediatric advice via the Canberra Hospital GP Advisory Phone Line between 12-2pm Monday-Friday (see number below or via Canberra Hospital Switchboard).

Further information

- Contact details for **ACT Health Communicable Disease Control**:
 - Phone: 02 5124 9213Email: cdc@act.gov.au

Fax: 02 5124 8810

After-hours pager: 02 9962 4155

- Canberra Hospital GP Advisory Phone Line for paediatric clinical advice: 0422187373 (Mon-Fri 12-2pm), or via Canberra Hospital Switchboard
- Further information on the global situation: https://www.who.int/emergencies/disease-outbreak-news/item/2022-DON376

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ACT Health

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