Outbreak of acute hepatitis in children

In the last 8 weeks, specialized paediatric liver centres in the UK identified more children with acute liver failure due to hepatitis of an unknown cause than would be expected over a similar period. In retrospect, numbers appear to have increased from January 2022 onwards and come from all regions of the UK. Small clusters of less than 15 cases, are also reported in other European countries such as Spain, Italy and the Netherlands, which is likely higher than normal rates.

In the UK, the numbers are slowly increasing and there are now more than 150 cases reported and about 10 children underwent liver transplantation. However, the total numbers remain low due to the rarity of the disease.

Typically, these are children under 5 years old, presenting with a prodromal disease with malaise and mild gastro-intestinal symptoms, from a few days to weeks before progressing to hepatitis with elevated serum transaminases (>500 iu/L). Few children progress to acute liver failure with jaundice, hepatic encephalopathy and coagulopathy and require super-urgent listing for liver transplantation.

It is still too early to speculate about the magnitude of the epidemic, geographic spread and definite source of the acute hepatitis. The majority of children with hepatitis have tested positive for adenovirus and the leading hypothesis is that there is a link between the two. It may, however, be that more than one single factor is responsible for the severity of the illness, such as reduced exposure to viruses during the pandemic, a new strain of the virus, another infection or a toxin. A link with SARS-CoV-2 infection has not been excluded. Almost all affected children have no previous past medical history and are thought to have a normal immunity. Public health professionals and specialists in paediatric hepatology, virology, pathology and infection control are working intensively to investigate this further, raise awareness among health-care professionals and the public, and to ensure appropriate management of the children is provided and referral to specialist liver centres of those who need it.

Despite sincere concerns about severity of the disease in some children, it is important to stress that overall numbers remain low. Specialist liver teams, who normally see at least a few children with hepatitis each year, have managed to cope well with increased numbers of children with liver disease under their care.

Doctors and general public are asked to be vigilant for symptoms of jaundice in children. The more cases are known, the more likely it will be for scientists to find the source and best management. We support current initiatives to pool experience and systematically investigate the potential cause.
Moreover, the international community of liver specialists and ELITA believe that all children with hepatitis, including the majority who recover well without specialist care or liver transplantation, would benefit from monitoring for at least 6 months following recovery to ensure no longevity of liver disease and potential aplastic anaemia as a complication of seronegative hepatitis.


We will update this news item with data from ongoing investigations into the potential cause of unusual high number of acute hepatitis cases being seen in children and best management.