

News & Comments

Adeno-Associated Virus 2 May Cause Hepatitis in Children

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One thousand hepatitis cases without an explanation were reported in children in more than 35 countries between April and July of this year. More than a quarter of these cases occurred in the United Kingdom, with nearly A hepatitis virus infection (such as hepatitis A or C) usually causing childhood hepatitis. However, no traces of hepatitis viruses were detected in these children or in any of the other related cases even though they had elevated levels of hepatitis markers in their blood.

These cases of hepatitis may be linked to adenovirus infection. It is extremely common for children to contract adenoviruses. The most common infections they cause are mild colds, pink eye (conjunctivitis), and stomach problems. On rare occasions, they can cause hepatitis if they reach the liver.

Since adenoviruses cause hepatitis rarely in healthy people, it is difficult to say that this was the likely cause.

Researchers of two new studies carried out independently and simultaneously in Scotland and London believe adenovirus, adeno-associated virus 2 (AAV2), and an underlying genetic predisposition are responsible for the spate of severe hepatitis cases in children.

In the absence of another "helper" virus, AAV2 does not cause disease. According to both teams, severe liver disease is most likely caused by co-infection with either AAV2 and an adenovirus, or sometimes by HHV6 the herpes virus.

Moreover, researchers cautioned that it is uncertain if AAV2 was the main pathogen or rather a biomarker for underlying adenovirus infections that are harder to detect. As a direct cause, neither team found any recent or previous SARS-CoV-2 infections.

Both teams speculate that lockdowns might have contributed to the spike in hepatitis cases, either by lowering immunity in children or by altering virus circulation patterns.

KEYWORDS

Children hepatitis, adeno-associated virus, adenovirus, herpesvirus, health, hepatitis, hepatitis in children, cause of hepatitis in children

