

- Children—diseases

Rare condition in kids with Covid-19: What to watch out for

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A rare condition where different organs in the body are inflamed has been found in some children infected with Covid-19.

Multi-system inflammatory syndrome in children (MIS-C) is the subject of ongoing research, with attempts to identify risk factors.

Some experts believe that Covid-19 antibodies produced by the child following an infection result in the development of this syndrome, while others say genetic factors may be at play.

While giving an update on Monday on the pandemic situation in Singapore, Singapore's director of medical services Kenneth Mak said a sixth MIS-C case has been detected.

The children are between two months and 11 years old. Three have recovered and one may be discharged soon. The Straits Times answers some questions about MIS-C.

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Must the child be infected with Covid-19 to develop MIS-C?

A MIS-C is a condition where the child's immune system overreacts after a Covid-19 infection, typically two to eight weeks later.

"It is speculated that Covid-19 antibodies produced by the child following an infection result in the development of this syndrome," said Associate Professor Thaschawee Arkachaisri.

The senior consultant heads the paediatric rheumatology and immunology department at KK Women's and Children's Hospital (KKH). He added: "According to the definition set by the World Health Organisation (WHO) and the Centre for Disease Control and Prevention (CDC), there must be a Covid-19 association before a MIS-C diagnosis can be given."

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What is the difference between MIS-C and Kawasaki disease?

A MIS-C has symptoms similar to Kawasaki disease, which has been linked to various viral or bacterial infections and occurs in 150 to 200 children a year in Singapore.

Kawasaki disease is an illness that results in inflammation in blood vessels throughout the body and affects mostly children younger than five years old.

Paediatric immunologist Liew Woei Kang said that although MIS-C and Kawasaki disease may share overlapping clinical features, studies in the United States indicate MIS-C can affect a wider age range. Children with MIS-C also tend to have more prominent gastrointestinal and neurological symptoms, are seen more frequently with low blood pressure and are more likely to display cardiac dysfunction than children with Kawasaki disease.

Associate Professor Chong Chia Yin, senior consultant in infectious diseases at KKH, said the hospital found no MIS-C cases among over 280 paediatric Covid-19 patients admitted to KKH last year.

Since last year, KKH has been serving as the primary hospital for paediatric Covid-19 cases.

Prof Chong noted that KKH has not seen Covid-19-related cases of Kawasaki disease, adding: "The number of Kawasaki disease cases also declined... and none of the Kawasaki disease cases fulfilled the MIS-C criteria defined by WHO and CDC."

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Who is at risk of developing MIS-C and what symptoms should parents look out for in their children so they can get timely medical attention?

A Prof Arkachaisri said parents should not be overly concerned because the syndrome is treatable if detected early.

Most patients, such as those treated at KKH, make a full recovery and lead normal lives.

But parents should be vigilant for MIS-C if their child has a history of close contact, is infected or had been infected with Covid-19.

Severe symptoms that may indicate MIS-C include difficulty breathing, persistent pain or pressure in the chest, vomiting, abdominal pain, acting unusually sleepy or confused, feeling unusually weak or dizzy, looking pale, and having grey or blue-coloured lips.

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Where should parents or guardians seek help if they suspect their child has MIS-C?

A Prof Arkachaisri said parents should consult a paediatrician or seek children's emergency care immediately if the child develops severe symptoms. "The child will need to be treated in a specialist children's hospital such as KKH, since some will require intensive care."

Q What are some precautions parents can take?

A As the mechanism of how Covid-19 triggers MIS-C is still under study, preventing Covid-19 infection is the best strategy to guard against MIS-C.

Prof Arkachaisri recommends complying with strict hygiene standards such as washing hands with soap and water, avoiding contact with sick people and regular disinfection of high-touch surfaces.

"It is also recommended for children to take the Covid-19 vaccine when it is made available to them."