

VITAL TO PROTECT CHILDREN FROM COVID IN LIGHT OF MIS-C

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Paediatricians urge parents and caregivers to take safety precautions to protect their children from contracting Covid-19 since it is the best way to avoid post-Covid-19 complications in children.

Multisystem Inflammatory Syndrome in Children (MIS-C) is a condition where different body parts can become inflamed, including the heart, lungs, kidneys, brain, skin, eyes, or gastrointestinal organs. Paediatricians claim that the MIS-C was previously reported in the UK and several other countries and is now spreading among children in Sri Lanka.

As of June 19, six children who contracted MIS-C were being treated at the Lady Ridgeway Hospital for Children and some of them had recovered.

According to medical experts, Covid-19 causes comparatively milder problems in children than in elderly individuals. But some children may need extra medical attention because of Multisystem Inflammatory Syndrome (MIS-C) symptoms.

"One can prevent it only by preventing Covid-19 infection in children. So it is necessary to make your children follow all precautions and preventive measures such as safe distance, hand hygiene, and the usage of masks. Parents should take special care that children avoid contact with a family member who is Covid-19 positive. Ideally, safeguard children by protecting every member of your family by observing all necessary precautions and following all instructions of the health authorities," the Health Promotion Bureau said in a statement.

According to the Health Promotion Bureau, it is important to identify the symptoms of the disease early. Paediatricians urge parents and caregivers to pay close attention to the following symptoms, as some children may not present with symptoms of a corona infection and may present only with symptoms of this condition: persistent fever lasting for over 24 hours; stomach pain; diar-

4 things you need to know about Multisystem Inflammatory Syndrome in Children (MIS-C)

1. **Appears to be a rare condition in children**
2. **May show up weeks after COVID-19 infection**
3. **Causes inflammation across multiple organs, including:**
Heart, Lungs, Kidneys, Brain, Skin, Eyes, Gastrointestinal
4. **Produces varying symptoms in children, but they can include:**
Fever, Abdominal pain, Vomiting, Diarrhea, Neck pain, Rash, Bloodshot eyes, Feeling extra tired

COVID-19: In Children

There has been an increase in COVID-19 cases related to "Kawasaki-like" disease in children

Multi-System Inflammatory Syndrome in Children (MIS-C)
"Kawasaki-like" disease

AGE: Infants to teens

- No cough or shortness of breath
- Nose & Throat: Fever, Swollen lymph nodes
- Lungs: Inflammatory response to lungs (hospitalized children have needed additional O₂)
- Heart: Inflammation of arteries
- Abdomen: Stomach pain
- Skin: Rash
- Blood: Toxic shock (with very low blood pressure, cannot send oxygen and nutrients to organs)

Kawasaki Disease

AGE: <5

- Both involve inflammation of body
- EYES: Irritation & redness of eyes
- Nose, Mouth, Throat: Swollen lymph nodes, Inflammation and inflammation: Throat, Mouth & Lips
- Heart: Coronary aneurysms (dilatations of arteries)
- Skin: Rash, Swelling of hands and feet

In the News:

- In Italy (May 19): 30-fold increase in incidence of "Kawasaki-like" disease (Lancet)
- In NYC (May 14): confirmed 110 cases of MIS-C (NYT) 3 have passed away (ABC)
- Handful of cases reported in other states & countries (NYT)

Contact a pediatrician if your child presents with fever, rash or abdominal pain as these may not be signs of a typical childhood illness.

rhoea; vomiting; extreme tiredness; faster breathing; rapid heartbeat; redness on tongue and lips; swollen hands or feet with redness; or redness in the eyes.
Besides these symptoms, one should also look for the following emergency signs that need prompt medical attention: the

child's nails, skin or, lips appearing pale or turning greyish or bluish; the child is continuously sleeping and is finding it difficult to stay awake; or there is very severe stomach pain or the child finds breathing difficult.
Paediatricians stressed that the severity and variety of

signs and symptoms can differ for different children. So they urge that if such symptoms occur, the child should be taken to a hospital as soon as possible and referred for treatment.

Also, under the current circumstances, great care must be taken to protect children from the Covid-19 infection. If one person in the house becomes infected with the Covid-19 virus, there is a very high risk of the virus spreading in the house, so the residents should alternative accommodation during this time.

Visitors should also be kept to a minimum whenever possible during this time. A child is more likely to become infected with the Covid-19 virus whenever a non-resident engages in close contact. Children may be unhappy about not being allowed to socialize during the Covid-19 epidemic. Try to keep them as active and happy as possible at home. Parents are advised to create a peaceful and child-friendly home environment to allow their children to relax and also to boost their intellectual development. Give them opportunities to connect with relatives and friends over the phone and online.

Meanwhile, a new study in Britain delivers some reassuring data for parents: most symptoms of MIS-C (also known as Paediatric Inflammatory Multisystem Syndrome, or PIMS) appear to fade over time.

"These findings can hopefully signal cautious optimism that many of the most severe effects of PIMS appear to resolve themselves within six months," said study co-author Dr. Justin Penner, of the Great Ormond Street Hospital for Children in London.

According to Penner's team, MIS-C is believed to be an immune overreaction that typically occurs about four to six weeks after mild or asymptomatic infections with SARS-CoV-2, the virus that causes Covid-19.

Symptoms of MIS-C include fever, rash, eye infection and gastrointestinal symptoms such as diarrhoea, stomachache and nausea. In rare cases, the condi-



tion can become severe and even lead to multiorgan failure. "Although deaths from Covid-19 are uncommon among children, they do occur, and of those who experience this inflammatory reaction, long-term disability is an important concern," said Dr. Michael Grosso, Chief Medical Officer and Chair of Paediatrics at Northwell Health's Huntington Hospital, in Huntington, New York.

"Knowing this may increase the urgency of protecting children with immunization," added Grosso, who wasn't involved in the new study.

The British research was small – just 46 patients ages 18 and younger, with patients averaging 10 years of age. All were admitted to the Great Ormond Street Hospital between April 4 and Sept 1, 2020.

All the children had systemic inflammation, and most had severe effects on different systems in the body during their initial illness. Overall, 45 experienced gastrointestinal symptoms, 24 showed neurological symptoms, and 15 had heart symptoms.

However, six months after their discharge from the hospital, most of the children's

inflammation, gastrointestinal, heart and significant neurological symptoms had resolved, which suggests that long-term damage to the organs is rare, according to the study published on May 24 in *The Lancet Child & Adolescent Health Journal*.

However, a small number of children who had severe MIS-C still had problems after six months, such as muscle fatigue, mental health effects such as emotional difficulties, and difficulty exercising. These issues were so serious that the children required ongoing support, the researchers noted.

None of the children in the study died, and all but one were back in full-time education (virtually or face-to-face) after six months, Penner and his colleagues said.

They stressed that their findings are preliminary and larger studies are needed.

As MIS-C is "a very rare complication of Covid-19 in children, our study included a small number of children from one hospital," Penner said in a journal news release.

As well, "the persisting fatigue, difficulty exercising and mental health effects we saw in some children, which can interfere with daily lives, must be closely moni-

tored, and patients should continue to be supported by medical teams with a range of specialisms," he added.

The researchers noted that because there was no control group, it's difficult to know to which extent some findings may be associated with being admitted to a paediatric intensive care unit, having a severe new condition during a pandemic, or to MIS-C itself.

The study authors also pointed out that their findings do not rule out other longer-term effects appearing beyond six months after hospital discharge, and stressed the importance of ongoing follow-up of patients who have had MIS-C.

For his part, Grosso called the findings a "good news and bad news" story. While the overall results are reassuring, lingering health problems in a minority of patients "has very serious implications for their quality of life," he said, and "so far, the duration of such problems remains unknown."

Dr. Teresa Murray Amato is Chair of Emergency Medicine at Long Island Jewish Forest Hills Hospital in New York City. Reading over the new report, she agreed that the recovery of most of the patients was "encouraging," but it's better that children never get Covid-19 to begin with.

"With this information, it is important that parents should speak to their paediatricians as vaccines roll out for children," Amato said. "As we know, most children do very well after Covid infections. However, this study highlights that even though the number of children with long-term effects are small, Covid can still be harmful." (Sources: HPB, Consumer HealthDay)