

# Covid-19 Related Disease

## Why in News

Recently, the **Paediatric Intensive Care Society (PICS)** of the **United Kingdom** has observed an apparent rise in the number of children suffering from a **multi-system inflammatory state**. Doctors believe that it **could be related to** Covid-19.

## **Key Points**

- Multi-system Inflammatory State
  - It is a rare illness that causes inflammation of the blood vessels leading to low blood pressure. It affects the entire body as it causes a build-up of fluid in the lungs and other organs.
  - Patients suffering from it require intensive care to support the lungs, heart and other organs.
  - Symptoms:
    - · Abdominal and gastrointestinal symptoms.
    - Cardiac inflammation.
    - Overlapping symptoms of Toxic Shock Syndrome (TSS) and Kawasaki disease as well.

### Toxic Shock Syndrome

- It is a rare condition which is caused by certain bacteria which enter the body and release harmful toxins.
- It could be fatal if not treated in time.
- **Symptoms:** High temperature, headache, sore throat, cough, diarrhea, dizziness or fainting, difficulty breathing and confusion.

### Kawasaki Disease

- It is an acute inflammatory disease of the blood vessels and usually occurs in children below the age of five.
- The inflammation in the coronary arteries that are responsible for supplying blood to the heart results in enlargement or in the formation of aneurysms (swelling of the wall of an artery), leading to heart attacks.
- **Symptoms:** Fever, rashes, redness of the cornea, red and cracked lips, a red tongue and lymph node enlargement of the neck.

#### Relation to Covid-19

- Only a few children with the symptoms of the multi-system inflammatory state **tested** positive for Covid-19. So, it remains unclear if and how the inflammatory syndrome is related to the virus.
- It is suggested by some doctors that the illness **may be a post-infection inflammatory response,** where the immune system gets over-stimulated.
  - A syndrome associated with an overstimulated immune system response is

## the **Cytokine Storm syndrome.**

- This syndrome may develop as a response to <u>coronavirus</u>, leading to sepsis, multiple organ failures and even death.
- This could be the reason for the negative Covid-19 test results in some children with this
  illness because they could have already recovered from the virus before the
  inflammation set in or the tests simply did not detect the virus.
- These diseases and conditions are rare but it is important that clinicians are made aware of any potential emerging links so that they are able to give children and young people the right care swiftly on time.

#### Source: IE

