

**28 – 11 – 2021**

**News: Multisystem Inflammatory Syndrome in Children**

- Recently, the World Health Organization (WHO) has released **fresh guidelines for treating children who developed Multisystem Inflammatory Syndrome (MIS-C) after being exposed to Covid-19 infection.**

## **Multisystem Inflammatory Syndrome in Children**

### **(MIC)**

- Multisystem Inflammatory Syndrome in Children (MIC) is a condition **where various organs of the body are affected by inflammation.**
- The patient develops **heart problems**, the severity of which may determine the line of treatment.
- It is a rare **but severe hyperinflammatory condition in children and adolescents that typically occurs 2-6 weeks after a Covid-19 infection.**
- It is a **potentially deadly condition where different body parts can become inflamed, including the heart, lungs, kidneys, brain, skin, eyes, or gastrointestinal organs.**

- Children with MIS-C may have a fever and various symptoms, including abdominal (gut) pain, vomiting, diarrhea, neck pain, rash, bloodshot eyes, or feeling extra tired.

### **MIS-C with Neurological Complications**

- In a recent study, young people with the MIS-C syndrome have shown neurological issues which were life-threatening such as strokes or severe encephalopathy (any brain disease that alters brain function or structure).
- Neurological symptoms include hallucinations, confusion, speech impairments, and problems with balance and coordination.
- The new findings strengthen the theory that the syndrome is related to a surge of inflammation triggered by an immune response to the virus.

### **Causes of MIS-C**

- As the Syndrome is less researched, there are varied theories as to what causes MIS-C.
- While some researchers believe that MIS-C is a delayed response to the corona virus which in turn causes massive inflammation in the body and as a result damages organs.

- Others believe that it can also be a result of the children's immune response making antibodies against the virus.
- There may be a genetic component as not every child develops MIS-C and the presenting symptoms are so varied.

### **WHO Guidelines for Treatment**

- It is suggested to use corticosteroids in addition to the standard of care for Kawasaki disease (conditional recommendation, very low certainty) in hospitalized children(0-18 years of age).
- Commonly referred to as steroids, corticosteroids are a type of anti-inflammatory drug.
- Corticosteroids along with supportive care resulted in a more effective treatment than either intravenous immunoglobulin plus supportive care or supportive care alone.
- The treatment was also found to be effective in treating children with Kawasaki disease in association to Covid-19.
- Not to use corticosteroids in the treatment of patients with non-severe Covid-19 as the treatment brought no benefits, and could even prove harmful.

## Kawasaki Disease

- Kawasaki Disease 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.**

**News:** 'Leprosy free' Odisha now sees a worrying rise in cases

- Odisha declared itself leprosy free in 2006-07, with cases dropping below 10,000 and the prevalence rate below 1%. Now, the state is witnessing an increase in the rise of Leprosy.

## Leprosy

- Leprosy is also known as **Hansen's disease.**
- Leprosy is a **chronic, progressive bacterial infection.**
- It is caused by a **bacterium** called Mycobacterium Leprae, which is an acid-fast rod-shaped bacillus.

- It is a **disease that leaves a terrifying image in its wake of mutilation, rejection, and exclusion** from society.
- It infects **Skin, Peripheral nerves, Upper respiratory tract and Lining of the nose.**
- Leprosy is **transmitted mainly by breathing airborne droplets from the affected individuals.** It can be **contacted at any age.** Leprosy is **curable** with the combination of drugs known as Multi-Drug Therapy (MDT).
- The 1<sup>st</sup> Phase of the World Bank supported the National Leprosy Elimination Project started from 1993-94. In the year 2001, after the global elimination was achieved, **India was among the 14 countries that missed the target of eliminating leprosy.**
- The National Leprosy Eradication Programme that was launched after this, achieved the goal of elimination of leprosy as a public health problem, defined as less than 1 case per 10,000 Population, at the National Level in December 2005. In 2017, the SPARSH Leprosy Awareness Campaign was launched to promote awareness and address the issues of stigma and discrimination.
- In commemoration of the 150<sup>th</sup> birth anniversary of Mahatma Gandhi on 2<sup>nd</sup> October 2019, the NLEP has prepared the comprehensive plan to reduce the grade to disability to less than one case per million people by October 2019.