

Rare complication mimicking Kawasaki disease among children infected with COVID-19: A heads-up for paediatricians

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Dear Madam, We are amidst a pandemic of coronavirus disease of 2019 (COVID-19) that began in late 2019 and has quickly spread worldwide. It has a wide diversity of clinical features in adults and life-threatening complications in people with underlying co-morbidities. For reasons not completely understood, the paediatric population infected with severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) presents with less severe clinical symptoms when compared to the adult population.¹ In April 2020, a mysterious hyper-inflammatory syndrome mimicking Kawasaki disease (KD) appeared in children that came about as sequelae of SARS-CoV-2 infection and termed multisystemic inflammatory syndrome in children (MIS-C).² MIS-C, otherwise known as "paediatric inflammatory multisystem syndrome temporarily associated with severe acute respiratory syndrome coronavirus 2" (PIMS-TS), manifests with a wide variety of clinical features, a few of them found among these children are a fever that lasts for more than 3-4 days, mucocutaneous involvement such as conjunctivitis and rash and gastrointestinal symptoms like diarrhoea and vomiting.² One of the feared complications of MIS-C is multi-organ dysfunction, with cardiovascular being the frequent one.

Recently, a new strain of SARS-CoV-2 called (Delta) variant, also known as lineage B.1.617.2, has paved its way into Pakistan.³ This variant produces a high amount of viral load and is twice as contagious as the original strain of SARS-CoV-2.⁴ Although there are currently no studies showing increased risk of developing MIS-C associated with this variant, the high transmission rate puts the paediatric population at increased risk of contracting the virus. The signs and symptoms of this syndrome overlap with many other bacterial and viral childhood illnesses making it difficult to diagnose. Therefore, the world health organization (WHO) has prepared a preliminary case

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definition that characterizes the clinical patterns that include duration of fever, serum markers of inflammation and evidence of prior infection with SARS-CoV-2 to better identify and start early interventions for this syndrome.⁵ A report from Italy revealed a staggering 30-fold rise in KD like cases in children during the outbreak of COVID-19.⁶

As the new exceedingly contagious strain of (Delta) variant is on the rise in Pakistan, there is a high chance that the number of children with COVID-19 related MIS-C may escalate. In summary, children presenting with unexplained fever, rash, and contact history with a COVID-19 infected should be suspected of MIS-C and treated accordingly with the guidelines provided by WHO.

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