兒童多系統發炎症候群與成人多系統發炎症候群

Multi system inflammatory syndrome in child (MIS-C) and in adult (MIS-A)

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Children are as susceptible to infection with SARS-CoV-2 as adults, but the symptoms of COVID-19 primary infection usually mild or asymptomatic. However, a small proportion of children develop a life-threatening hyperinflammatory state 4–6 weeks after primary COVID-19 infection termed Multisystem Inflammatory Syndrome in Children (MIS-C). A similar condition has also been reported as a rare complication of COVID-19 in adults (MIS-A). Children who develop MIS-C are generally previously healthy and in contrast, patients with MIS-A have been reported up to age 50 years and more likely to have underlying health conditions. The typical presentations of MIS-C are persistent fever associated with gastrointestinal symptoms (pain, vomiting, diarrhea), evidence of mucocutaneous inflammation (rash, conjunctivitis, oromucosal changes), lymphopenia, and high levels of circulating inflammation. A subset of MIS-C patients develops severe disease including hypotension/shock and evidence of cardiac involvement including myocarditis, myocardial dysfunction, and coronary artery changes. MIS-A patients otherwise have remarkably overlapped clinical features with MIS-C, although the severity of cardiac dysfunction, the incidence of thrombosis and the mortality of MIS-A may be higher. Immune modulation has been used with best supportive care to treat MIS-C. Excellent response to immunomodulation further suggests that MIS-C is driven by postinfectious immune dysregulation rather than directly by the virus.