CARDIOVASCULAR FLASHLIGHT

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Regression of coronary arteries aneurysms 6 months after multisystem inflammatory syndrome in children (MIS-C)

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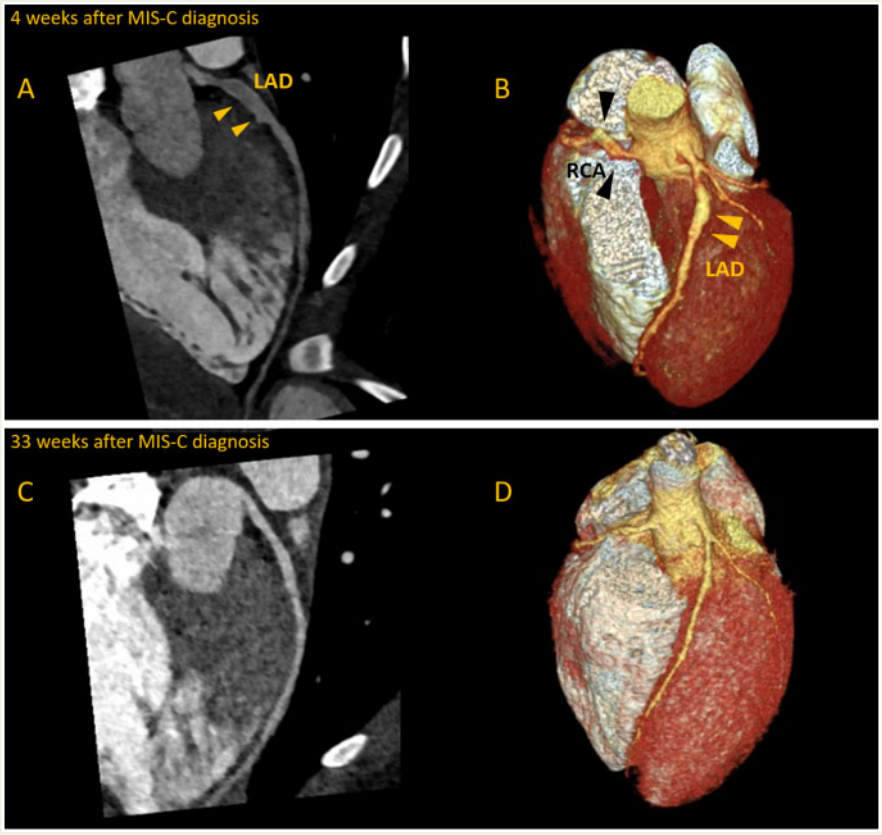
Multisystem inflammatory syndrome in children (MIS-C) is a rare complication of SARS-CoV-2 infection, with an incidence of about 1:100 000 children. According to published case series, between 10% and 40% of MIS-C develop coronary artery modifications, mainly hyperechogenicity, with a lower incidence of true aneurysm.

In a previous issue of this journal, we reported the case of a 10-year-old male with medium left anterior descending (LAD) coronary artery aneurysm (*z*-score +7.9) and small right coronary artery (RCA) aneurysm (*z*-score +2.9) detected 1 week after his hospital admission for hypotensive shock in the context of MIS-C. He was treated with 2 g/kg intravenous immunoglobulin (administered after coronary artery dilatation was observed, as the recognition of MIS-C was contemporary with our case), corticosteroids, and anakinra. He rapidly normalized his initial mild LV dysfunction and cardiac enzymes elevation.



The patient has been on antiplatelet therapy since discharge with regular outpatient cardiology follow-up. Repeat computed tomography at 6 months demonstrated coronary artery aneurysms regression (*Panels A* and *C*, curved muliplanar reconstruction and *Panels B* and *D*, volume rendering), with near normalization of the coronary arteries maximal diameter: LAD *z*-score +2.3 and RAD *z*-score +1.8. Moreover, no coronary stenosis was observed.

Coronary arteryaneurysm in the context of MIS-C can regress after a few months. Further research is needed to assess if this finding reflects a generalisable outcome and to study the effect of medical treatment in the evolution of coronary artery dilatation post-MIS-C.

The data underlying this article are available in the article.

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