

Giant coronary aneurysm in Kawasaki disease, utility of coronary computed tomography

Aneurisma coronario gigante en la enfermedad de Kawasaki, utilidad de la TC coronaria

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A 14-year-old boy with a history of ostium secundum atrial septal defect, closed percutaneously, was admitted in our institution with a 5-day history of fever and generalized rash. Physical findings included pruritic maculopapular erythematous rash, fingers edema, conjunctival hyperemia, oropharynx bright red mucosa, and submandibular and axillary adenopathies. Trans-thoracic echocardiography (TTE) demonstrated dilation of coronary arteries. The right coronary (RCA) was dilated proximally (7 mm, Fig. 1A) as well as was the left main artery (LMA) (5 mm Fig. 1B). To improve characterization of findings, a coronary computed tomography (CT) (CT of 128 detectors was used with dual energy. A retrospective acquisition was performed with dose modulation. Atenolol intravenous (5 ml) was administered) was performed confirming the presence of large coronary aneurysms predominantly in bifurcations areas (Fig. 1C). The LMA presented a giant aneurysm (14 mm × 12 mm) (Fig. 1D), LAD exhibited aneurysms in proximal and middle third (7.4 mm × 4.5 mm and 6 mm × 6 mm, respectively) (Fig. 1E). Circumflex exhibited aneurysms in proximal segment (6 mm × 5 mm) (Fig. 1F). RCA was diffusely dilated: 8.3 mm × 8 mm

proximal, 7 mm × 6.6 mm in middle, and 5 mm × 5 mm in distal third (Fig. 1G). Diagnosis of Kawasaki disease was made, and treatment with aspirin, anticoagulation, and immunoglobulins was started. TTE is being performed routinely with no changes in aneurysm dimensions.

Kawasaki disease is an acute self-limiting vasculitis of unknown etiology¹. Coronary aneurysms are the main complication and the leading cause of long-term morbidity and mortality, especially giant aneurysms (>8 mm)¹. For this reason, it is essential an early treatment; therefore, a prompt diagnosis is mandatory. ETT is a very useful technique to evaluate coronaries¹. However, CT is more sensitive than ETT detecting aneurysms and improving their characterization².

Conflicts of interest

All authors have no conflicts of interest to disclosure.

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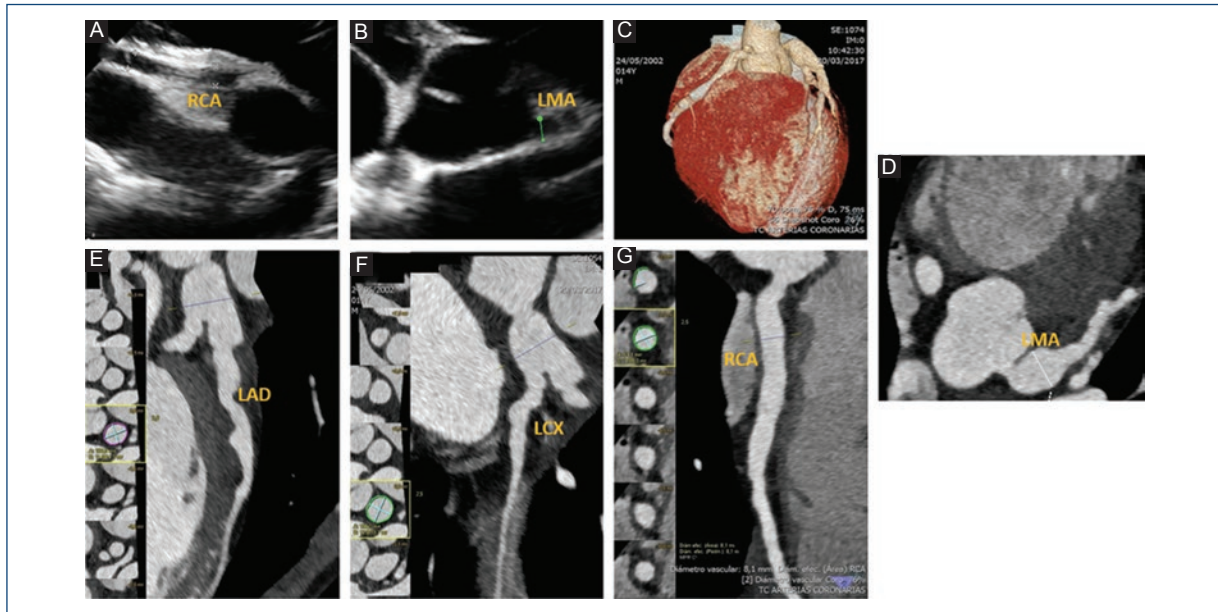


Figure 1. (A-G) Coronary aneurysms. (A) Transthoracic echocardiography (TTE) demonstrating dilation of the right coronary artery; RCA: right coronary artery. (B) TTE demonstrating dilation of the left main artery; LMA: left main artery. (C-G) Coronary computed tomography confirming the presence of large coronary aneurysms; LAD: left anterior descending artery; LCX: left circumflex artery.

Ethical disclosures

Protection of human and animal subjects. The authors declare that no experiments were performed on humans or animals for this study.

Confidentiality of data. The authors declare that they have followed the protocols of their work center on the publication of patient data.

Right to privacy and informed consent. The authors have obtained the written informed consent of the

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