# Congenital left atrial appendage pseudoaneurysm, cardiomyopathy, and mitral regurgitation

# Sir,

Congenital left atrial appendage (LAA) pseudoaneurysm may be addressed by an emergent surgical procedure as presented by Halas et al.,<sup>[1]</sup> and in some instances, it can be medically followed; however, if left untreated, this congenital condition may lead to cardiomyopathy and fatal consequences. Pseudoaneurysm is a contained rupture of some components of the histologic wall. Congenital atrial aneurysm is an extremely rare defect with <100 cases being reported.<sup>[2]</sup> We report a 37-year-old asymptomatic male diagnosed with severe mitral regurgitation, ejection fraction (EF) of 30%, atrial fibrillation, and a pseudoaneurysm of the LAA that was taken to surgery. A median sternotomy was performed, and the heart was arrested using cardioplegia, and a transseptal approach was chosen. The mitral valve was myxomatous with bileaflet fibrosis and calcification not amenable to repair. The pseudoaneurysm originated at the base of the LAA and then extended into a large 12 cm  $\times$  15 cm pericardial cavity [Figure 1a-d]. A web across the neck of the pseudoaneurysm was resected [Figure 1, blue arrows]. The mitral valve was replaced with a 29 mm St. Jude mechanical valve. The pseudoaneurysm was closed with a Gore-Tex patch [Figure 1d]. After weaning

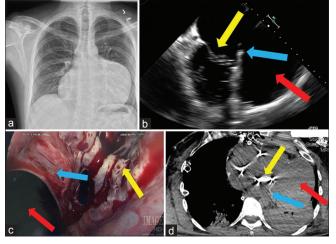


Figure 1: (a) Chest X-ray, (b) echocardiography, (c) surgeon view, (d) postoperative computed tomography scan. Red arrow: pseudoaneurysm, blue arrow: membrane/patch, yellow arrow: mitral valve

from cardiopulmonary bypass with an intra-aortic balloon pump, transesophageal echocardiography showed trace residual mitral regurgitation and no residual LAA aneurysm with EF 20%–25%. Several hours later, the patient was returned to surgery for instability, and the echocardiography revealed severe biventricular dysfunction. The patient was placed on extracorporeal biventricular assist devices, but ultimately expired a month after the operation due to ischemic bowel felt to indirectly result from the severe underlying cardiomyopathy. This patient illustrates that cardiomyopathy and mitral regurgitation can accompany large pseudoaneurysms of the LAA.

## Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent forms. In the form the patient(s) has/have given his/her/their consent for his/her/their images and other clinical information to be reported in the journal. The patients understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

#### Financial support and sponsorship

Nil.

# Conflicts of interest

There are no conflicts of interest.

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Accepted: 03-04-2019 Published: 17-07-2019

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## Letters to Editor

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Access this article online	
Quick Response Code:	Website: www.annalspc.com
	DOI: 10.4103/apc.APC_10_19

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**How to cite this article:** Barac YD, Quinones Q, Schroder J, Glower DD. Congenital left atrial appendage pseudoaneurysm, cardiomyopathy, and mitral regurgitation. Ann Pediatr Card 2020;13:107-8.

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