Left ventricular pseudoaneurysm in dengue fever

Dengue fever is a disease with clinical manifestations ranging from asymptomatic infection to a severe disease. A 4-year-old boy was admitted with serologically proven dengue haemorrhagic fever, with clinical features of heart failure. ECG was suggestive of pericarditis (figure 1A); chest X-ray PA view showed cardiomegaly (figure 1B); echocardiography (figure 1C–E) and MRI (figure 1F) showed pericardial effusion with evidence of pseudoaneurysm of left ventricle. Mechanism of pseudoaneurysm was thought to be due to severe myocarditis which led to cardiac rupture and contained within the pericardium. As the relatives were not keen for a surgery, intensive supportive medical management of heart failure continued. Symptoms improved. Serial echo after 3 months (figure 2A, B) showed resolution of both pericardial effusion and pseudoaneurysm. A majority of patients with dengue fever have relatively benign disease course. Few patients develop severe clinical manifestations, including bleeding, organ impairment and endothelial dysfunction with increased capillary permeability causing hypovolaemic shock. Dengue can also cause myocardial impairment, arrhythmias and, occasionally, fulminant myocarditis. We present this case, as pseudoaneurysm in dengue fever is not reported in the literature.

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Contributors SM was involved in the diagnosing and treating of the patient. SM made substantial contributions to the conception and design of the case report, and

Figure 1  (A) ECG showing features of pericarditis. (B) Chest X-ray showing mild cardiomegaly. (C–E) Echo image showing narrow-mouthed sac-like out-pouching with pericardial effusion suggestive of pseudoaneurysm. (F) MRI image of sizing of pseudoaneurysm.

Figure 2  (A and B) Follow-up echo showing no pericardial effusion or pseudoaneurysm.
the acquisition, analysis and interpretation of the data. JN, the co-author assisted in preparing the manuscript.

Competing interests None.

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