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## Case Reports

# Varicella myopericarditis mimicking acute myocardial infarction with ARDS – A rare association in an immunocompetent young adult



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## ABSTRACT

Primary varicella infection in an immunocompetent young adult is very rare, but it has a high mortality rate due to serious complications. We report a rare association of varicella pneumonia presenting in acute respiratory distress with mild chest pain, however with electrocardiographic and biochemical markers suggestive of acute ST elevation myocardial infarction. Coronary angiography was done to exclude infarction, serum antibody titers confirmed varicella, acyclovir was started, and ARDS was successfully treated with steroid pulse therapy and mechanical ventilator support. Early administration of antivirals and aggressive management of ARDS were thought to be necessary to overcome the potential life-threatening complications of varicella infection in adults. This case illustrates that not every MI is really MI.

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A 27-year-old gentleman with fever, chest pain, and vesiculopustular eruptions on face and trunk presented to ER with tachypnea. He was hemodynamically stable and cardiovascular examination was normal. There were diffuse bilateral crackles. Chest radiogram revealed bilateral fluffy infiltrates. Arterial blood gases revealed O<sub>2</sub> saturation of 82%, PaO<sub>2</sub>/FiO<sub>2</sub> ratio <200 suggestive of ARDS. The patient was electively started on mechanical ventilator support. Electrocardiogram revealed ST elevation in precordial leads<sup>1</sup> (Fig. 1). Laboratory investigations revealed leucocytosis, Troponin I 1.71 ng/ml, and BNP 2450 pg/ml. Bedside 2D echocardiogram revealed

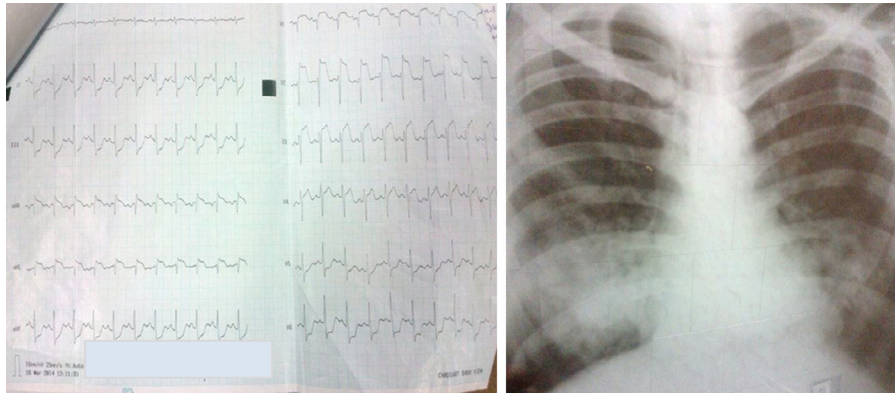
global hypokinesia with EF 40% and minimal pericardial effusion. In view of suspicion of acute coronary syndrome, he was started on dual antiplatelet therapy and unfractionated heparin along with broad-spectrum antibiotics. On the fifth day, as soon as he was weaned off ventilator support, coronary angiogram was done which revealed normal epicardial coronaries (Fig. 2). A strong suspicion of viral myopericarditis was considered which was confirmed by elevated varicella IgM titer of 1.82 IU. Later, the patient was started on parenteral acyclovir and steroids for 7 days. Gradually, his symptoms resolved and he was discharged on aspirin 850 mg TDS for 4

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**Fig. 1 – Electrocardiogram and X-ray chest on day 1 of hospitalization.**



**Fig. 2 – Coronary angiogram showing normal left and right coronary arteries.**

weeks and oral acyclovir for 7 days with an uneventful follow-up period of 6 months.<sup>1,2</sup> The follow-up electrocardiogram at the time of discharge and after 3 months showed near complete resolution of ST-T changes, and also the 2D

echocardiogram at 3 months showed improvement in left ventricular function from 40% to 53%. Clopidogrel was discontinued at the time of discharge; however, the patient continued to take aspirin 75 mg once daily for 3 months after the initial high dose therapy for 4 weeks.

#### Conflicts of interest

The authors have none to declare.

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