

中文題目：病歷報告：登革熱併發心碎症候群

英文題目：Dengue Fever Complicated with Takotsubo Cardiomyopathy：A Case Report

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Background

Dengue is the most common mosquito-borne arboviral disease. The clinical manifestations of dengue range from a mild, flulike and self-limited febrile illness to severe illness with severe plasma leakage, severe hemorrhage and/or organ involvement. In Taiwan, cyclical dengue epidemics have occurred since the 1980s, leading to large disease and economic burdens. A large dengue epidemic occurred in southern Taiwan in 2015. During the epidemic, one was found to be complicated with an unusual and potentially fatal takotsubo cardiomyopathy. We herein report this case and discuss the implications of cardiac complications in dengue affected patients.

Methods

We herein report this case and discuss the implications of cardiac complications in dengue affected patients.

Results

A 60-year-old woman with dengue fever due to dengue virus serotype 2, experienced sudden onset chest pain and transient alteration of consciousness on 8th day after onset of dengue illness. Clinically this masqueraded as acute myocardial infarction, with a remarkably elevated serum cardiac-specific troponin-I level of 4.894 ng/ml (normal value < 0.4ng/ml). The electrocardiography revealed prolongation of the QT interval with non-specific T wave change in precordial leads. The administration of intravenous heparin was deferred because of potentially active bleeding due to dengue-related thrombocytopenia and coagulopathy. Thus, supportive management with administration of intravenous fluids was given. An echocardiogram performed the following day disclosed hypokinesia of the middle and apical regions of the left ventricular. Her condition gradually improved over the following days. On the 14th day after onset of dengue illness, coronary angiogram was performed, revealed impairment of left ventricular systolic function with apical hypokinesis and normal coronary arteries. Takotsubo cardiomyopathy due to dengue virus infection was diagnosed. She was discharged from the hospital on day 21 after onset of dengue illness. The echocardiogram done 4 months after onset of dengue illness, revealed normal left ventricular systolic function.

Conclusion

Although there are some reports of myocarditis complicating dengue infection, takotsubo cardiomyopathy in dengue is rarely described in the literature. Our report offer valuable information to clinicians regarding the importance of a careful differential diagnosis when treating a febrile patient with chest pain in a dengue-endemic setting. Early recognition of myocardial involvement in dengue illness, prompt restoration of hemodynamic instability, and monitoring the clinical course is critical to avoid otherwise preventable morbidity and mortality.