中文題目：登革熱合併章魚壺心肌症：一病例報告

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

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Background: Takotsubo cardiomyopathy is referred to a transient, stress-induced cardiomyopathy, or a transient left ventricular apical ballooning syndrome. Postulated pathogenesis includes excess secretion of catecholamine, coronary artery spasm or focal myocarditis. It may occur after surgery or and acute medical condition such as acute emotional stress or septicaemia. Association with acute Dengue virus infection was rarely reported.

Case Report: This 72 y/o woman of hypertension and diabetes mellitus suffered from general malaise and poor appetite in recent days. She felt cold sweating and then became syncope on the morning. She denied fever, chest tightness, productive cough and tarry stool passage. As elevated cardiac enzymes (CPK, 312 - 341 IU/L; CK-MB, 13.0 - 18.4 ng/mL and Troponin I, 7848.8 - 8499.3 ng/mL), non-ST-elevated acute myocardial infarction (NSTEMI) was impressed. She was admitted on 104-08-05 and dual anti-platelet agents (aspirin and ticagrelor) were given. However, thrombocytopenia was noticed (67,000/μL). Other data included WBC, 3,200/μL; Hct, 35.9%; prothrombin time (PT), 9.8 Sec; APTT, >200 Sec; CRP, 3.7 mg/L; BUN, 23 mg/dL; creatinine, 0.70 mg/dL; and SGPT, 29 IU/L. Dengue NS1 Ag rapid test and Dengue virus-PCR were both positive. The anti-platelet agents were discontinued. The cardiac echo revealed hypokinesis of apical anterior wall of left ventricle (LV), adequate LV performance (EF: 56%), and mild pulmonary hypertension (PASP = 42 mmHg). Cardiac catheterization showed one-vessel coronary artery disease (LCX-D, 70% stenosis) and akinesia of mid and apical segments and well contracting basal segments, indicating takotsubo cardiomyopathy. Medical treatment without percutaneous coronary intervention (PCI) is suggested due to potentially worsening thrombocytopenia in the critical period of Dengue fever. CXR showed mild infiltration in bilateral lower lung zones and left lower lung haziness. Abdominal sonography revealed bilateral pleural effusion and bilateral perirenal fluid collection, but ascites was not detected. Meanwhile, tarry stool was found. The platelet count was lower to 50,000/μL on August 6 and was gradually elevated to 145,000/μL on August 9. The general condition was improved and she was discharged uneventfully on August 11.

Conclusion: We report Dengue fever combined with NSTEMI and takotsubo cardiomyopathy in a diabetic woman receiving medical therapy without PCI. Plasma leakage was likely present due to bilateral pleural effusion and bilateral perirenal fluid collection. The patient was safely discharged after a week of hospitalization.