

**PP051 CORONARY ARTERY  
VASOSPASM AFTER  
ADMINISTRATION OF  
NOREPINEPHRINE IN DENGUE  
SHOCK**

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**INTRODUCTION:**

Dengue Shock Syndrome (DSS) is associated with high mortality. Inotropic and vasopressor agents are important in the management of DSS.

**CASE REPORT:**

A 35-year-old woman presented with a three day history of fever, vomiting and headache. NS-1 antigen testing was positive and she was diagnosed as DSS. Despite 40 ml/kg fluid resuscitation she remained hypotensive with a blood pressure of 80/50 mmHg. She was subsequently started on low dose, single strength intravenous norepinephrine infusion (IVI NE). After 10 minutes, she developed sudden onset of chest pain, dizziness and bradycardia with a heart rate of 30-40 bpm and blood pressure of 60/40 mmHg. Cardiac monitor showed junctional bradycardia. Subsequent ECG showed ST-elevation at AVR, ST-depression in II, III, AVF, V2-V6. Her symptoms completely resolved with IV atropine 0.5mg and cessation of IVI NE. Repeated ECG showed normal sinus rhythm. Troponin T test was normal. Similar episodes recurred even on a lower dose of IVI NE. IVI Dopamine was therefore commenced without any side effect or complications. Patient was then admitted for further stabilization.

**DISCUSSION:**

Shock is a life-threatening condition. Fluid administration is often insufficient to stabilize the patient's condition, thus the need for adrenergic agents to correct

hypotension where NE is commonly used. Drug induced myocardial infarction in the majority of cases has been related with coronary artery spasm (CAS). IVI NE causes increased cardiac blood flow, a reflex bradycardia and vessels vasoconstriction that leads to narrowing of the arteries and prevent blood from flowing to the heart. Patients on vasopressors require continuous non-invasive hemodynamic monitoring such as blood pressure, pulse rate and oxygen saturation, to ensure rapid detection of changes in clinical status and allow for accurate assessment of progress and response to therapy.

**CONCLUSION:** IVI NE is the first-line agent recommended during resuscitation of shock but is not without adverse effects.