Abstract

Kounis syndrome is defined by the occurrence of an acute coronary syndrome with conditions associated with mast cell activation, involving interrelated and interacting inflammatory cells, and including allergic or hypersensitivity and anaphylactic or anaphylactoid attacks. A 34-year-old gentleman with a history of young hypertension came with a complaint of wasp sting over his left eyelid. Post sting, he developed shortness of breath associated with sweating, palpitation, however no shortness of breath. He was unconscious shortly after that. During the casualty review, the patient has cold and clammy peripheries with the swollen left eyelid. He is hypotensive and tachycardic. Respiratory and cardiovascular examination was unremarkable. Electrocardiography (ECG) showed ST depression over lead 1 and aVL with ST-elevation at lead V1-V3 and T inversion lead 1, aVL, V4 – V6. Repeated ECG showed evolving changes of ST-elevation over lead V1-V3. Troponin I, 3 hours post wasp sting was not elevated. The patient was given intravenous hydrocortisone, intramuscular adrenaline, antihistamine, and intravenous fluids challenge. Blood pressure normalized and repeated ECG showed resolved ST elevation changes. This patient fits the criteria for Kounis syndrome type 1 secondary to an anaphylactic reaction towards wasp sting. The ECG changes were attributed to the coronary artery vasospasm secondary to an anaphylactic reaction. Type 1 Kounis syndrome can happen with or without raised cardiac enzyme or troponin. It resolved by itself when proper medications were given to reverse the anaphylactic reaction. Early recognition of Kounis syndrome leads to correct treatment approach.

Keywords: Kounis Syndrome, acute coronary syndrome, anaphylactoid reaction, mast cell activation

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