Coronary stent thrombosis in a patient with acute myocardial infarction: Type 3 Kounis syndrome variant.

Kounis syndrome is hypersensitivity coronary disorder caused by allergic reactions. This syndrome is defined as the concurrences of acute coronary syndromes (ACS) including coronary spasm, acute myocardial infarction (AMI) and stent thrombosis. Three variants of Kounis syndrome are recognized, and in particular type 3 variant includes stent thrombosis in patients with stent implantation. We report a patient with AMI who was highly suspected as having type 3 Kounis syndrome variant. A 69-year-old man with no medical history presented with chest pain. Electrocardiography showed ST-segment elevation in the anterolateral lead, so ACS were highly suspected. Emergency coronary angiography was undergone and showed total occlusion in LAD segment 6. LAD was re-canalized after thrombus suction and then everolimus-eluting stent (3.5-23mm) was implanted. After the stent implantation, blood pressure decreased and in-stent translucency emerged. Phenylephrine bolus injection and continuous intravenous infusion of dopamine were ineffective against hypotension. An intra aortic balloon pumping catheter was finally inserted for cardiac support. Despite many times of thrombus aspiration and balloon dilation, stent thrombus was developed repetitively. To make a diagnosis of hypotension, transthoracic echocardiography (TTE) was done. TTE could not prove the cause of hypotension, but it became clear that urticaria had appeared on his chest at that time. Considering prolonged hypotension, his nettle rash and repetitive stent thrombosis, anaphylactic reaction was highly suspected. Epinephrine and methylprednisolone was injected. Thereafter blood pressure was gradually elevated and hives disappeared. Repetitive stent thrombosis may be associated with allergic reactions in this case. Kounis syndrome should be considered in the differential diagnosis of repetitive stent thrombosis.