

An Insight Into Classification of Kounis Syndrome: Letter to the Editor

Kounis Sendromunda Sınıflandırmaya Yeni Bir Bakış

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I want to congratulate Kartal et al. for their excellent review about Kounis syndrome.¹ In this article classification, clinical features, pathophysiology, treatment and prognosis of Kounis syndrome have been comprehensively discussed. However, an addition into classification section is mandatory.

Two variants of Kounis syndrome have been described so far.² The type I variant (coronary spasm), which might represent a manifestation of endothelial dysfunction or microvascular angina, includes patients with normal coronary arteries without predisposing factors for coronary artery disease in whom the acute release of inflammatory mediators can induce either coronary artery spasm without increase of cardiac enzymes and troponins or coronary artery spasm progressing to acute myocardial infarction with raised cardiac enzymes and troponins. The type II variant (coronary thrombosis) includes patients with culprit but quiescent pre-existing atheromatous disease in whom the acute release of inflammatory mediators can induce either coronary artery spasm with normal cardiac enzymes and troponins, plaque erosion, or rupture manifesting as acute myocardial infarction. Recently, an association between Kounis syndrome and drug-eluting coronary stent thrombosis is argued.³ Although the pathophysiology of drug-eluting stent thrombosis is multifactorial and has not been fully elucidated, allergic reactions to stent components may be one of the capable causes of this catastrophic entity. The use of bare metal stent is not associated with allergic reactions. However, all the components of the drug-eluting stent (nickel strut, polymer and impregnated drug) can induce allergy either separately or synergistically.³

Concomitant drugs such as clopidogrel and aspirin may also act as potential antigens. Although allergic reactions are now recognized as key components of stent thrombosis, the incidence, especially of subclinical cases, is likely under-reported. Recent studies show that coincidence of hypersensitivity reaction following implantation of drug-eluting stents and stent thrombosis may be considered as a manifestation of allergic myocardial infarction and must be regarded as type III variant of Kounis syndrome.^{4,5}

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