

Author's Reply

To the Editor,

We would like to thank the authors for their comments regarding our article in their letter entitled "Kounis syndrome not induced but prevented by the implantation of a drug-eluting stent," published in *Anatol J Cardiol* 2017; 17: 412-3 (1).

Cardiovascular disease is an increased risk factor for anaphylactic severity. Various pathophysiologic mechanisms have been reported to explain cardiac anaphylaxis. In healthy individuals, a large number of mast cells exist in cardiac tissues, particularly among myocardial fibers, around the blood vessels, and in the intima of the coronary arteries. Because of the allergic reaction, the activation of mast cells in the skin and lungs, as well as in the heart, results in the release of various mediators such as histamine, leukotriene C₄, prostaglandin D₂, tryptase, kinase, and renin. The release of these mediators leads to cardiac symptoms such as coronary artery spasm, hypotension, dysfunction of cardiac contractility, and arrhythmia.

In patients with coronary artery disease, there is an increase in the number and concentration of mast cells in the coronary arteries and atherosclerotic plaques. In allergic reactions in patients with an atherosclerotic heart disease, activation of mast cells and release of mediators can lead to acute coronary syndrome by causing coronary artery spasm, plaque erosion, and rupture (2).

Our case was diagnosed with type 2 variant of Kounis syndrome because the patient already had an underlying coronary artery disease, and the first drug induced an allergic reaction that resulted in myocardial infarction. Our patient had a single 90% lesion in the midportion of the left circumflex artery, and the implanted stent completely restored the coronary circulation.

Following the intake of the same drug for the second time, in which a similar or more severe hypersensitivity reaction is expected, the patient developed anaphylaxis without cardiac involvement. It is likely that the coronary artery disease was treated and active and the vulnerable plaques were stabilized, and therefore, Kounis syndrome did not occur during the second drug reaction.

Although drug-releasing stents themselves cause hypersensitivity in rare cases when applied to the patient with correct indications, microvascular function recovery and increased microcirculatory resistance index are reduced (3).

Thus, it is possible to prevent an anaphylaxis from becoming more severe.

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Patients' knowledge and perspectives on vitamin K antagonists for stroke prevention in atrial fibrillation: implications for treatment quality

To the Editor,

Contemporary management of atrial fibrillation (AF) focuses on effective thromboprophylaxis with either direct oral anticoagulants (DOACs) or vitamin K antagonists (VKAs; e.g., warfarin/acenocoumarol). Although DOACs offer a viable alternative, the majority of patients continue to receive VKAs. The quality of VKA therapy is determined by the proportion of time spent in the target range (TTR) of the international normalized ratio (INR, 2.0–3.0). The greatest benefit with VKAs is derived with TTR of $\geq 70\%$ (1), whereas a low TTR predisposes to adverse outcomes (2).

Obtaining a stable INR that corresponds to TTR of $\geq 70\%$ is often challenging owing to social, clinical, and behavioral influences. The SAME-TT₂R₂ score (Sex, female; Age, <60 years; >2 medical comorbidities; amiodarone treatment; tobacco smoking; race, non-white) has been recently proposed to facilitate the differentiation of patients who are expected to achieve stable anticoagulation (i.e., SAME-TT₂R₂ score of ≥ 2) from those who are at a risk for labile INR (3). However, beyond clinical and social aspects, behavioral factors pertaining to the patients' comprehension and acceptance of the complex requirements of VKA therapy could also affect treatment quality (4).

We report the results of a survey that assessed the knowledge and expectations regarding VKA treatment in a cohort of patients with non-valvular AF (n=416; mean age, 65.1±9.9 years; 63.7% males) and the influence of the investigated behavioral factors on the quality of anticoagulation, as determined by 1-year TTR. An optimal anticoagulation was defined as 1-year TTR of $\geq 70\%$.

Regarding VKA-related knowledge, 98.1% of patients properly identified AF as an anticoagulation indication, and 97.3% pro-