

## Editorial

# Kounis Syndrome: A Diagnosis You Don't Want to Forget

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**Received:** June 11, 2014; **Accepted:** June 18, 2014;

**Published:** June 20, 2014

In 1991, Kounis and Zavras described a clinical report [1] after a drug intake. This syndrome was defined as “the coincidental occurrence of chest pain (clinical symptoms similar to an unstable vasospastic or nonvasospastic angina and even as acute myocardial infarction) and allergic reactions accompanied by clinical and laboratory findings of classic angina pectoris caused by inflammatory mediators released during the allergic insult” [2] and was called as “allergic myocardial infarction” [3,4].

Afterwards, they described 3 variants [5]:

- Type I or with normal coronary arteries without predisposing factors for coronary artery disease. 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.
- Type II or with culprit but quiescent pre-existing atheromatous disease in which the acute release of inflammatory mediators can induce either coronary artery spasm with normal cardiac enzymes and troponins or plaque erosion or rupture manifesting as acute myocardial infarction.
- Type III or with coronary thrombosis (including stent thrombosis) in which aspirated thrombus specimens stained with hematoxylin-eosin and Giemsa demonstrate the presence of eosinophils and mast cells respectively.

Although we think this syndrome is rare and its incidence is low, we don't want to forget about this possibility in patients with a myocardial failure, and it could be a possible etiology of sudden death in patients that cannot go to an Emergency Unit because they are alone (or they are sleeping, for example) or they don't think their symptoms are important, because the release of histamine and

metabolites arising from the arachidonic acid cascade can induce a serious allergic insult [6].

If you go to congresses or if you read scientific issues, you will see that Kounis syndrome incidence is growing since the time it was first described, and every year there are new implicated drugs. Moreover, there are several Kounis syndrome published after hymenoptera sting [7], food intake [8] or contrast media [9]. These etiologies mean that Kounis syndrome has to be considered as an important clinical problem.

But, what can we do to improve our patients' quality of life? Can we avoid this syndrome? Nowadays these questions have got a complicated answer. On the one hand, this syndrome is young (less than 10 years old) and there are few patients in the world in order to consider a possible association between this syndrome and other situations (atopy, genetic predisposition, etc). On the other hand, research is very important to look for solutions or theories that would explain this illness situation.

In my own opinion, we have to open our Allergy Departments to the hospital and to the normal population, because I am sure that there are a lot of patients with this syndrome that aren't diagnosed correctly, and the more patients well diagnosed, the more knowledge about this syndrome and the more possibilities will manifest to prevent this situation.

To conclude, clinical sessions in Emergency or Cardiology Departments can be a solution to know the real incidence of this illness, and we have to look for possible cases in these Departments, in order to describe a diagnostic protocol to be published and applied by a high percentage of allergists.

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