

# Kounis syndrome: an analysis of spontaneous reports from international pharmacovigilance database

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**INTRODUCTION.** The coincidental occurrence of a cardiac symptomatology (e.g. an acute coronary syndrome or a myocardial infarction), during an anaphylactic or anaphylactoid episode is known as Kounis Syndrome (KS). A variety of drugs, substances, food and environmental exposures are associated with this reaction. There is an exponential increase in the number of published scientific articles reports on this syndrome, but since it is rare, the largest case series published so far accounts included only 10 and 6 patients.

**AIM.** To increase the awareness about KS by clinicians considering that the diagnosis of Kounis Syndrome is raising in the international pharmacovigilance reports.

**METHODS.** We searched the global World Health Organization database called VigiBase™ to detect all cases of Kounis Syndrome ever reported (last update December 31st 2014).

**RESULTS.** We identified 51 cases of Kounis Syndrome with an increase from 2010 to 2014. Most cases occurred in the USA and non steroidal anti inflammatory drugs, cardiovascular drugs and antibiotics were the most frequently suspected drugs. Patient characteristics showed a mean age of  $46 \pm 22$  years old (range 2 – 84) and a prevalence of male subjects of 63%.

The collected information on the duration of treatment with the suspected drugs showed that majority of patients started receiving these drugs one day or less before the event, thus highlighting that the KS was an acute event triggered by very short drug exposure.

**CONCLUSION.** We collected pharmacovigilance international data representing the largest case series ever published on the recently identified Kounis syndrome. For the rarity of cases and few information it is not possible to establish a causal relation between the suspected drugs and the occurrence of KS.