Kounis syndrome: A silent killer under the blanket

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ABSTRACT

Summary: Allergy angina syndrome or allergic myocardial infarction is an immune-mediated coronary spasm which is also known as Kounis syndrome (KS). It's not uncommon, but it's often underdiagnosed. In a typical case of allergy, a skin reaction may be preceding symptoms and shock status may be a severe accompanying symptom. KS may cause devastating events namely cardiac arrest in some extreme cases. A 40-year-old obese gentleman with underlying intrapapillary mucinous neoplasm of uncinate process of pancreas was electively admitted for pancreaticoduodenectomy. He had a past medical history of hypertension and chronic gout arthritis with no previous history of ischemic heart disease. Intraoperatively was uneventful and he was monitored in the intensive care unit postoperatively. However, due to new onset obstructive jaundice postoperatively, he was subjected to contrast-enhanced computed tomography (CECT) of the abdomen for further evaluation. Following injection of contrast, he developed generalized skin rashes followed by respiratory distress and cardiac arrest. Intravenous steroids and antihistamine were given immediately. He was resuscitated for 9 minutes, and ECG post-resuscitation showed new onset ST segment elevation V3-V6. Bedside echocardiography revealed preserved ejection function with no obvious hypokinetic segment. Repeated ECG two hours later noted resolution of the ST elevation with the absence of Q wave, T wave inversion, and return into sinus rhythm. Unfortunately, he was complicated prolonged hospital stay, seizure, hypoxic-ischemic encephalopathy (HIE), persistent abdominal sepsis and subsequently succumbed after 27 days of admission. As per the above case, cardiac arrest following contrast agent administered should ring a bell about Kaonis syndrome. Diagnosis made needs the concurrent presence of acute coronary syndrome and an allergic event. Every contrast agent has the potential to cause KS. Therefore it is very crucial to detect and treat promptly as it may also lead to death.

Keyword: allergy-angina, Kounis syndrome, hypersensitivity syndrome

Safety of favipiravir in COVID-19 patients with end stage renal disease

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ABSTRACT

Introduction: Favipiravir is a synthetic antiviral prodrug which has been repurposed to treat COVID-19. Although widely used, evidence on the safety and tolerability of favipiravir in End-Stage Renal Disease (ESRD) is limited. Our aim is to evaluate the safety profile of Favipiravir in COVID-19 patients with ESRD and their associated clinical outcomes. **Materials and Methods:** We retrospectively evaluated records of 324 hospitalized adult patients who took at least 1 dose of favipiravir, from May 1, 2020 to February 28, 2021. With regards to safety outcomes, ESRD patients on renal replacement therapy (RRT) were compared to a control group without renal impairment who were matched 1:1 to cases for age and gender. Univariate regression analyses were performed on possible predictors for the development of Adverse Events (AE). **Results:** ESRD group had 22 times higher risk of hospital mortality (p=0.002, 95% CI 3.0-171.1) and longer median length of stay (11% vs 8%, p<0.0001) compared to control. Favipiravir was discontinued in 18 (5.6%) patients. Out of a total 81 (25% of 324) patients with AEs, 54% had ESRD. These AEs consisted of transaminitis (11.7%), nausea/vomiting/gastrointestinal pain (GI AEs) (4.9%), diarrhoea (4.6%), dizziness or headache (2.8%), and rash (0.9%). GI AEs were significantly more common in ESRD vs control arm. In multivariate analysis, the history of drug allergy was the only significant predictor of AE. ESRD status did not increase the risk of having an AE with favipiravir. **Conclusion:** Despite being a high-risk group, ESRD did not increase overall risk of AE with favipiravir use. Reported AEs cannot be solely attributed to favipiravir as the effect of disease states and concurrent medications cannot be ruled out.

Keywords: Favipiravir, COVID-19, End Stage Renal Disease