



Letter to the Editor

Cardiac magnetic resonance contributes to better diagnosis and management of type I Kounis syndrome

J. Xie^a, L. Qiu^a, Y. Tao^{a,*}, T. Zhu^b^a Department of Cardiology, Shengzhou People's Hospital, The First Affiliated Hospital of Zhejiang University Shengzhou Branch, Shengzhou City, Zhejiang Province 312400, China^b Department of Cardiology, The Second Xiangya Hospital of Central South University, No. 139 Middle Renmin Road, Furong District, Changsha City, Hunan Province 410011, China

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In the article written by Abdelghany M and his team [1], they reviewed the epidemiology, clinical presentations, diagnostic findings and managements of Kounis syndrome (KS). KS can be divided into three variants and type I is the most common variant. It is often considered as acute allergic insult induces coronary artery spasm with increased cardiac enzymes biomarkers. Although troponin is sensitive for the diagnosis of myocardial injury, it could not confirm the mechanism of myocardial damage which may have substantial implications for clinical managements. Therefore, for the patients of type I KS, besides routine myocardial enzymes biomarkers, angiographic evidence, further evaluation is necessary.

Accumulating studies [2,3] have demonstrated cardiac magnetic resonance (CMR) imaging not only allows precise quantification of cardiac function but also has the unique ability to characterize various pathophysiological effects of acute myocardial injury, such as myocardial

edema, inflammation, necrosis or fibrosis. Moreover, Aylin Okur and his team [4] have researched the utility of CMR imaging in type I KS and demonstrated the typical imaging features were myocardial edema without late gadolinium enhancement, which is the evidence of reversible myocardial injury. Although it has similar clinical presentations with conventional acute coronary syndrome (ACS), the pathophysiology mechanism and prognosis of them are far different. Therefore, we think that it is a special ACS characterized by reversible myocardial ischemia induced by allergic reaction, so the guidelines for the management of conventional ACS may not apply to it. Patients of type I KS may benefit from the treatment of allergic reaction and coronary spasm. In conclusion, CMR contributes to better diagnosis and appropriate managements of KS. Prospective studies are required to demonstrate treatment benefit and long-term outcomes with a greater number of patients.

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* Corresponding author at: Department of Cardiology, Shengzhou People's Hospital, The First Affiliated Hospital of Zhejiang University Shengzhou Branch, No. 666 Dangu Road, Sanjiang District, Shengzhou City, Zhejiang Province 312400, China.

E-mail address: taoyuan06@163.com (Y. Tao).