LETTERS TO THE EDITORS

Letter relating to the publication entitled “Evolution of acute coronary syndrome with normal coronary arteries and normal cardiac magnetic resonance imaging” by Chopard et al. (Arch Cardiovasc Dis 2011;104:509–17)

Syndromes coronaires à coronaires angiographiquement normales et IRM cardiaque normale: peut-on affirmer qu’il s’agisse d’un syndrome coronaire?

Keywords: Acute coronary syndrome; Cardiac MRI; Troponin; Prognosis
Mots clés: Syndrome coronaire aigu; IRM cardiaque; Troponine; Pronostic

We read with great interest the recent publication by Chopard et al. relating to the prognosis of patients with suspected acute coronary syndrome (ACS) but normal coronary arteries and absence of abnormality on cardiac magnetic resonance imaging (MRI) [1]. As thoroughly described by the authors, the management of patients with acute chest pain and cardiac troponin elevation may be challenging and should first rule out the most common life-threatening diagnosis (i.e. ACS). However, 10% of patients present with ACS and normal coronary arteries assessed by angiography [2]. In such cases, cardiac MRI late-enhancement imaging is exceedingly sensitive in the detection of myocardial necrosis. MRI is so sensitive that it has been used to assess the occurrence of very small myocardial injuries after angioplasty [3]. Whereas the likelihood of ACS with normal coronary angiography is not trivial, the likelihood of ACS with normal coronary arteries and normal cardiac MRI is close to zero. In such a clinical setting, it is at least very difficult to distinguish ACS with certainty from, for example, myocarditis, which can clinically mimic ACS and presents with troponin elevation and normal cardiac MRI in 25–40% of cases [4]. It has also been reported that pericarditis, which can also mimic ACS, can result in a slight troponin rise and would also present with normal cardiac MRI [5].

In the study of Chopard et al., patients were recruited for suspected ACS based on clinical history, troponin and electrocardiogram results. All patients had normal coronary arteries but cardiac MRI yielded a definite diagnosis in 64% of cases (myocardial infarction for 23%, myocarditis for 26% and takotsubo cardiomyopathy for 11%). Although 36% of patients had normal coronary arteries and normal cardiac MRI, and despite the title of the study being “Evolution of acute coronary syndrome with normal coronary arteries and normal cardiac magnetic resonance imaging”, it is unclear if the authors finally retained or excluded the diagnosis of ACS for these patients.

Therefore, the question to Chopard et al. is: how sure are they that their cohort population with ACS-like syndrome, elevated troponin and normal cardiac MRI did indeed have ACS rather than pericarditis or myocarditis? We think the question is important, not only because of the physiopathological aspect, but also because it will have a therapeutic impact according to the final diagnosis (i.e. antiplatelet therapy/statins/angiotensin-converting enzyme inhibitors in case of ACS compared with nothing if ACS has been ruled out). Clarification by the authors would certainly be of interest for daily clinical practice.

Disclosure of interest

The authors declare that they have no conflicts of interest concerning this article.

References

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