

## From Charybdis to Scylla when acute coronary syndrome complicates endocarditis

Bacterial infective endocarditis (IE) is a life-threatening condition for which a prompt treatment is mandatory to avoid heart valve destruction and septic embolism. These dreadful complications continue to be the leading causes of mortality and morbidity from IE, despite significant progresses in diagnostic methods and algorithms [1].

Systemic embolism from IE distributes according to both the magnitude of blood flow and flow resistance. In this regard, the large difference between the mainstream velocity jet and the stagnant flow in the sinuses of Valsalva mechanically confers a protection against embolisation to the coronary arteries, which explains why coronary embolisation is much rarer than in other locations. The risks of coronary embolisation include large-size vegetations and endocarditis from left-sided valves or prosthetic valves [2].

In this issue of *Acta Cardiologica*, Vandoren et al. published a nice *Image Focus* reporting the case of a patient with IE who eventually died from right coronary artery septic embolisation [3]. Interestingly, the diagnosis was made on catheter coronary angiography (CCA), which is the most common diagnostic procedure for coronary embolizations as it is indicated preoperatively in IE when a surgical valve replacement is contemplated. Recently, computed tomography coronary angiography emerged as an elegant and maybe safer alternative to CCA both for the diagnosis of IE-related vegetations and the assessment of the coronary arteries [3].

There is no consensus regarding the management of acute coronary syndrome from IE embolisation, especially given the low number of cases and [4]. Prevention of the excess mortality caused by coronary embolisation from IE thus merges with preventing IE itself. This requires applying strict preventive measures to individuals at risk, such as patients with heart defects, damaged or artificial heart valves such as the patient presented by Vandoren et al. [3]. As indications for prosthetic valves steadily increase with the ageing population, designing prosthetic materials with enhanced and durable antithrombotic and anti-infective properties is another increasingly approached challenge towards a better prevention of IE [5].

### Disclosure statement

No potential conflict of interest was reported by the author(s).

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Received 3 March 2023; Accepted 9 March 2023

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