

[PICTURES IN CLINICAL MEDICINE]

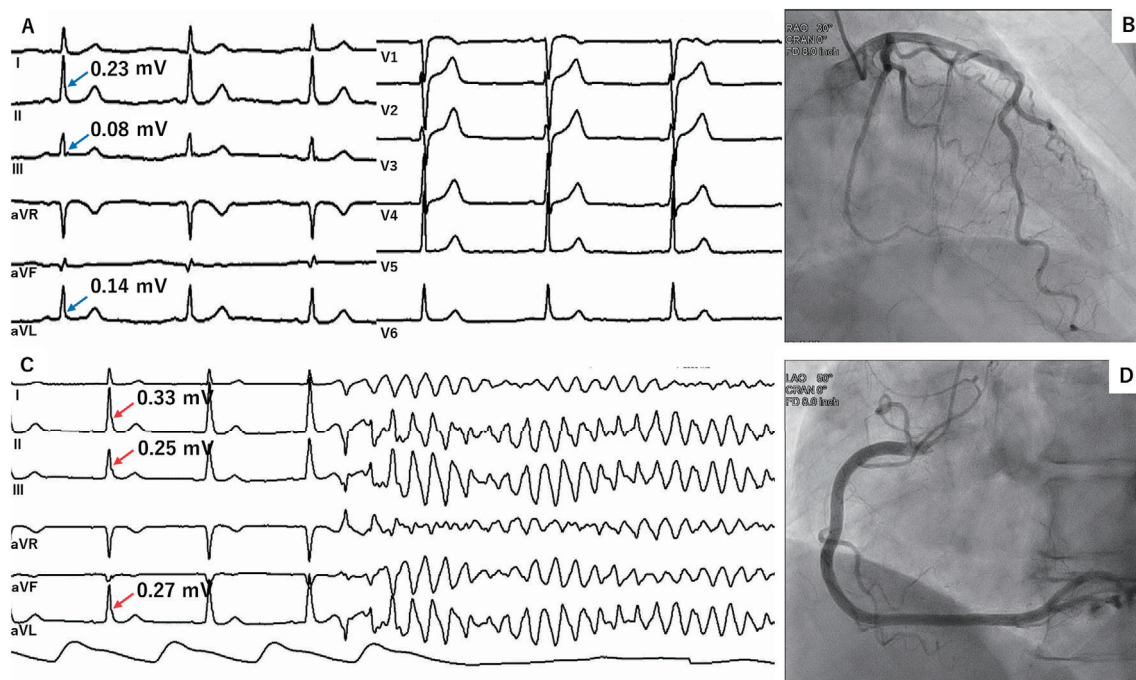
Ventricular Fibrillation with J-wave Augmentation During Coronary Angiography

Shuichi Kegai, Kazuya Yamamoto, Hiroshi Akanuma and Yuichi Katagiri

Key words: J-waves, ventricular fibrillation, contrast medium

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Picture.

An 80-year-old man with exertional dyspnea underwent coronary angiography (CAG) with iomeprol. His resting electrocardiogram (ECG) showed J-waves in inferior leads and no Brugada pattern (Picture A). Right CAG (RCAG) was performed, as the left CAG findings were normal (Picture B, D). We observed premature ventricular contraction and significant J-wave amplitude (Picture C), followed by ventricular fibrillation (VF) after the first RCAG injection. Catheter manipulation and super-selective intubation were excluded as possible causes. J-waves are occasionally observed during CAG. Local conduction delays cause J-wave induction and augmentation after contrast medium administration, especially after RCAG (1). Contrast-induced J-wave

augmentation rarely causes VF in patients with resting-ECG J-waves. Kariki et al. reported a case with J-wave augmentation and VF during bilateral CAG (2). Contrast-induced myocardial toxicity cannot be dismissed; however, the extent to which resting J-waves are a risk factor for VF remains unclear. Nonetheless, their presence during CAG must be noted.

The authors state that they have no Conflict of Interest (COI).

References

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Department of Cardiology, Iida Municipal Hospital, Japan

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Correspondence to Dr. Shuichi Kegai, g20031_6521@iCloud.com

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