ST segment elevation in precordial leads during percutaneous coronary intervention of the right coronary artery

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An 80-year-old woman with previous anterior myocardial infarction had chest pain on exertion. Coronary angiography revealed a severe stenosis in the proximal right coronary artery (Figure 1A), but no significant stenosis in the left coronary artery. A coronary stent was deployed in the proximal right coronary artery (Figure 1B). Immediately after the deployment, the right ventricular branch was occluded (Figure 1C), whereas the conus branch remained patent. She developed chest pain, and an electrocardiogram showed significant ST segment elevation in leads V1 to V3 (Figure 2). The right ventricular branch was reperused with balloon angioplasty (Figures 1D and 1E), and her chest pain disappeared. ST segment elevation was almost resolved on the final recording. Serum creatine kinase did not increase after the procedure. Clinicians should recog-

nize that ST segment elevation in precordial leads can occur due to the occlusion of the right ventricular branch as well as the left anterior descending artery (1,2).

REFERENCES

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Figure 1 Coronary angiography revealed a severe stenosis in the proximal right coronary artery (A). A coronary stent was deployed in the proximal right coronary artery (B). Immediately after the deployment, the right ventricular branch (arrow) was occluded (C). The right ventricular branch (arrow) was reperused with balloon angioplasty (D,E)

Figure 2 Serial electrocardiogram during percutaneous coronary intervention. The electrocardiogram showed significant ST segment elevation in leads V1 to V3 after stent deployment. This ST segment elevation was almost resolved after the reperfusion of the right ventricular branch with balloon angioplasty

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