Coronary artery dissection associated with ascending aortic dissection

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A 37-year-old man presented to his local hospital with 3 h of chest pain suggestive of an acute myocardial infarction. A physical examination revealed that he was in shock, with a blood pressure of 70/30 mmHg. Initial electrocardiography revealed ST segment elevation in leads II, III and aVF (Figure 1).

ST segment elevation myocardial infarction was suspected and he was transferred to the Seoul National University Hospital, a tertiary hospital in Seoul, South Korea, for primary coronary intervention. Emergent coronary angiography revealed an actively moving

dissection flap in the ascending aorta and a propagated dissection flap at the proximal portion of the right coronary artery (Figure 2). Emergent surgery was performed and revealed that the dissection site was 5 mm above the ostium of the right coronary artery. The ascending aorta was replaced. The surgery was successful and he remained well at the time of writing, 11 months after the event.

Figure 1) Initial electrocardiogram showing ST segment elevation in the inferior leads

Figure 2) Emergent coronary angiogram showing dissection flap in the ascending aorta (two arrows) and propagated flap in the right coronary artery (arrowhead)

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