

CARDIOVASCULAR FLASHLIGHT

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Life-threatening simultaneous acute stent thrombosis associated with anaphylactic shock due to contrast material

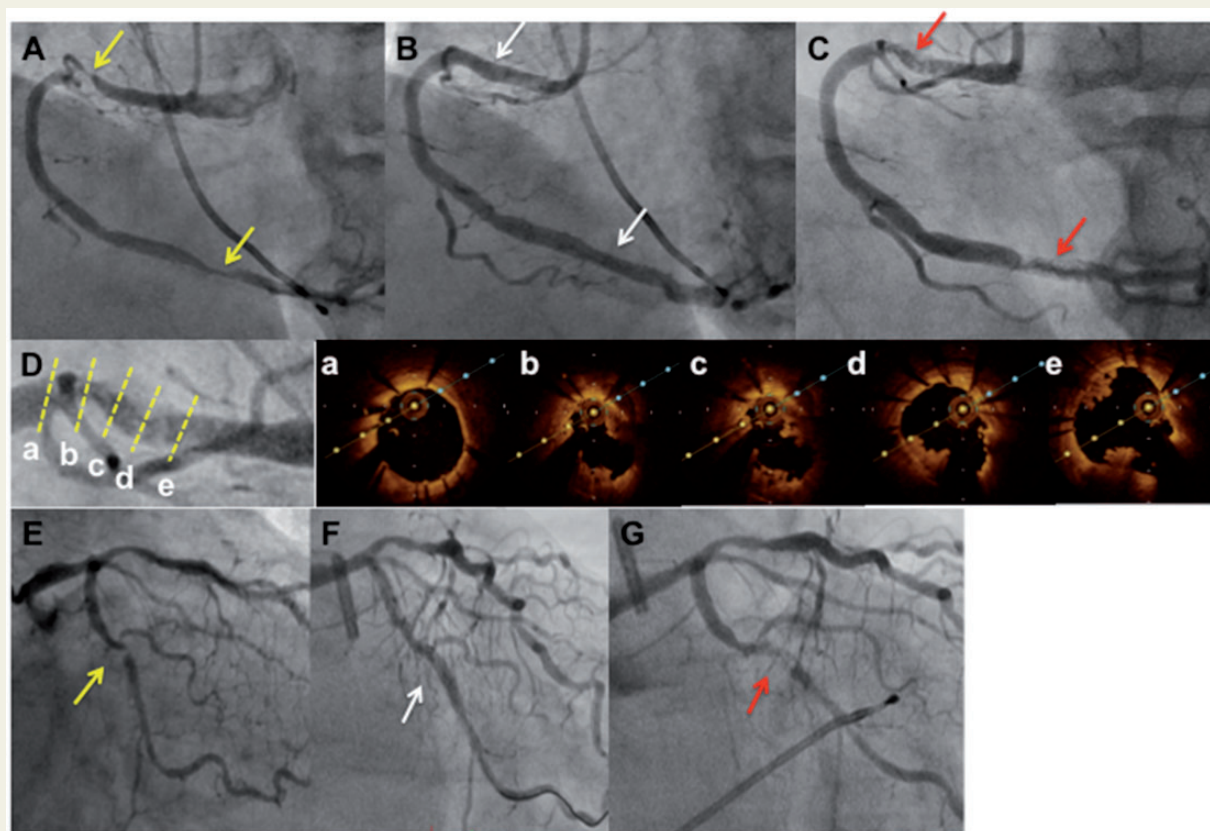
Akira Sato^{*†}, Daiki Akiyama[†], Tomoya Hoshi, and Kazutaka Aonuma

Cardiovascular Division, Faculty of Medicine, University of Tsukuba, 1-1-1, Tennodai, Tsukuba, Ibaraki 305-8575, Japan

^{*} Corresponding author. Tel: +81 29 853 3143, Fax: +81 29 853 3143, Email: asato@md.tsukuba.ac.jp

[†] The first two authors contributed equally to this work

A 66-year-old man with acute coronary syndrome (ACS) underwent emergent percutaneous coronary intervention (PCI) with implantation of two everolimus-eluting stents (EES) for severe stenosis in the proximal and distal right coronary artery (RCA) (Panels A and B). At 1 week, after EES implantation, we performed staged PCI for the stenotic lesion in mid left circumflex artery (LCx) (Panel E). After injection of contrast material into left coronary artery, blood pressure was 58/38 mmHg and the pulse rate 112 beats/min. He had an erythematous rash over all the body and complained of chest discomfort. Immediately, he was diagnosed anaphylactic shock, and intravenously administered 0.3 mg of epinephrine, 500 mg of hydrocortisone, 25 mg of diphenhydramine, and 20 mg of famotidine. However, because anaphylactic shock continued (blood pressure was 76/48 mmHg), we inserted intra-aortic balloon pump and continued to administer 0.16 µg/kg/min of epinephrine intravenously. After we put the direct implantation of EES (2.5/12 mm) in the mid LCx (Panel F), we performed coronary angiography (CAG) of RCA. Surprisingly, CAG revealed simultaneous acute thrombotic stenosis of the EES in the proximal and distal RCA. (Panels C and D, Supplementary material online, *Movie 1*) Optical coherence tomography showed white thrombus overlying the stent struts (Panels a–e, Supplementary material online, *Movie 2*). The patient underwent aspiration thrombectomy (aspiration of white thrombus) and subsequent successful balloon angioplasty for in-stent thrombosis. However, CAG revealed simultaneous thrombotic stenosis of the EES in



the mid LCx (Panel G), and also performed successful balloon angioplasty for in-stent thrombosis. In daily practice, careful attention should be paid to the co-incidental occurrence of ACS with hypersensitivity reactions following an allergenic event.

(A) Baseline coronary angiography (CAG) showed severe stenosis in the proximal and distal right coronary artery (RCA) (yellow arrows). (B) Index percutaneous coronary intervention was performed with implantation of two everolimus-eluting stents, Xience

Xpedition® (EES) in the proximal (3.5/15 mm) and distal (3.0/15 mm) RCA (white arrows). (C) CAG revealed simultaneous acute thrombotic stenosis of the EES in the proximal and distal RCA (red arrows). (D) Magnified image of acute thrombotic stenosis of the EES in the proximal RCA (a–e) Optical coherence tomography shows white thrombus overlying stent struts. (E) CAG revealed the stenotic lesion in mid left circumflex artery (LCx) (yellow arrow). (F) We performed the direct implantation of EES (2.5/12 mm) in the mid LCx (white arrow). (G) CAG revealed simultaneous thrombotic stenosis of the EES in the mid LCx.

Supplementary material is available at *European Heart Journal* online.

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