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IMAGE

Abciximab for distal thromboaspiration catheter-related embolization in ST-segment elevated myocardial infarction

Intérêt de l'abciximab pour l'embolisation coronaire distale liée au cathéter de thrombectomie dans l'infarctus du myocarde

Edouard Gerbaud*, Benjamin Seguy, Pierre Coste

Soins intensifs cardiologiques-plateau de cardiologie interventionnelle, CHU de Bordeaux, 5, avenue de Magellan, 33604 Bordeaux Pessac cedex, France

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KEYWORDS

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MOTS CLÉS

Abciximab ;
Thrombectomie ;
Embolisation
coronaire ;
Infarctus du myocarde
(sus-décalage du
segment ST)

A 48-year-old woman was referred to our department with an inferolateral STEMI (Fig. 1A). She received pretreatment with aspirin, a prasugrel loading dose (60 mg) and intravenous administration of 0.5 mg/kg enoxaparin.

Coronary angiography revealed proximal thrombotic occlusion of the LCx, without collateral flow (Fig. 2A, Video 1). An intracoronary abciximab bolus (0.25 mg/kg body weight) was given immediately after the diagnostic angiograms. Thrombectomy with a dedicated catheter resulted in proximal reperfusion, however, distal embolization occurred (Fig. 2B, Video 2). Despite multiple attempts at thromboaspiration, the distal thromboembolus remained (Fig. 2C, Video 3). The patient underwent direct stenting of the proximal LCx with a bare-metal stent (Fig. 2D and E, Video 4). Continuous abciximab infusion at 0.125 mcg/kg per min was given for 12 hours. At admission to the intensive care unit, the patient's chest pain had resolved and an electrocardiogram showed minor persistent ST-segment elevation (0.1 mV) in the inferolateral leads (Fig. 1B). One hour later, we observed the onset of an accelerated idioventricular rhythm followed by ST-segment normalization (Fig. 1C and D). Troponin I was raised to 76 ng/mL (normal \leq 0.04 ng/mL). Five days later, repeat coronary angiography confirmed complete resolution of the thrombus with TIMI 3 flow in the LCx (Fig. 2F, Video 5).

This case highlights that despite adequate pretreatment, intracoronary abciximab and thrombectomy, distal embolization can occur in STEMI. An abciximab bolus and particularly

Abbreviations: LCx, left circumflex coronary artery; STEMI, ST-segment elevation myocardial infarction; TIMI, thrombolysis in myocardial infarction.

* Corresponding author.

E-mail address: edouard.gerbaud@chu-bordeaux.fr (E. Gerbaud).

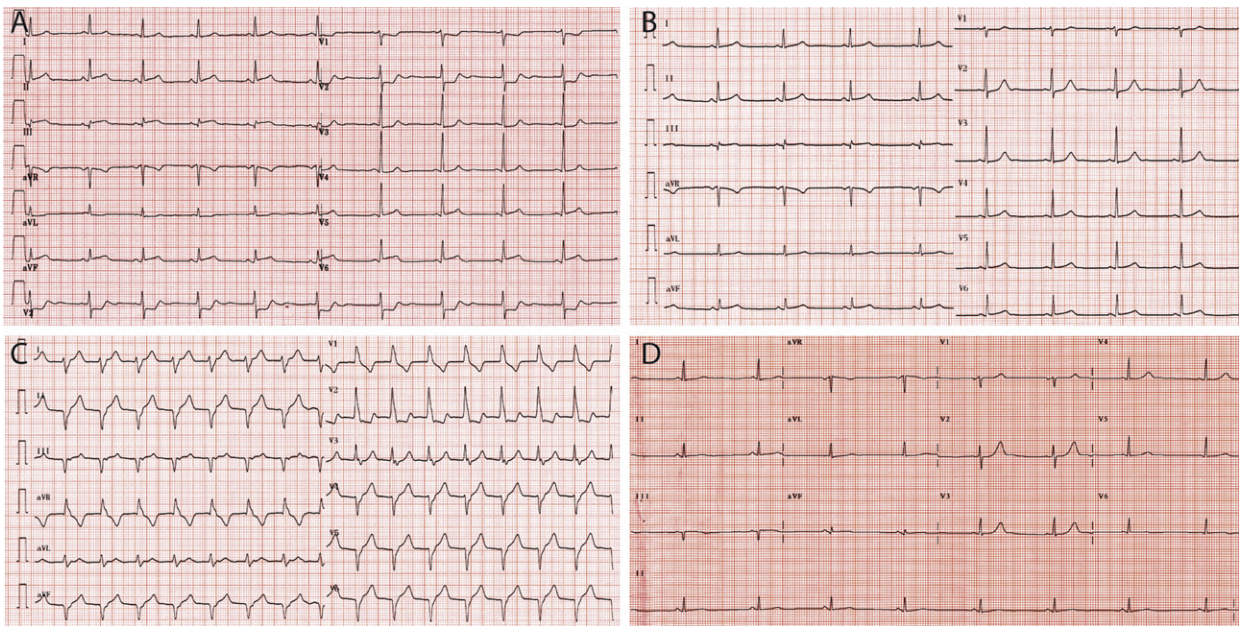


Figure 1. Panel A. Initial electrocardiogram (ECG) showing inferolateral ST-segment elevation with ST-segment depression in the anterior leads. Panel B. At admission to the intensive care unit after angioplasty, ECG showed minor persistent ST-segment elevation (0.1 mV) in the inferolateral leads. Panels C and D. One hour later, we observed the onset of an accelerated idioventricular rhythm followed by ST-segment normalization.

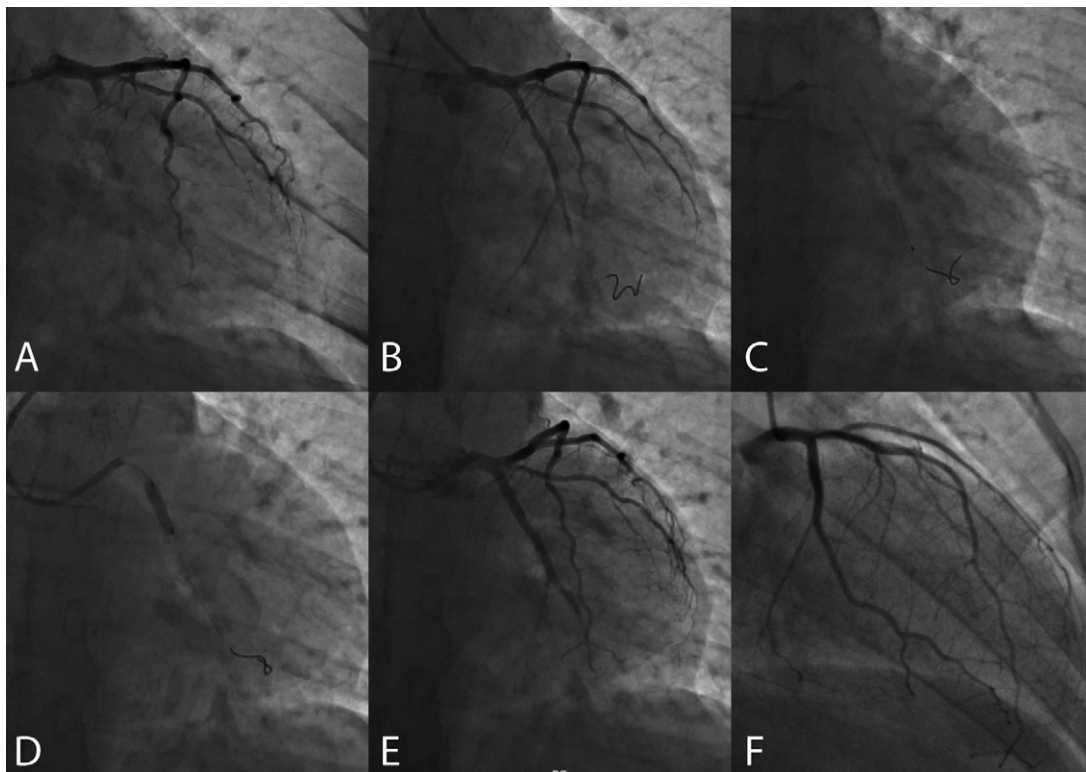


Figure 2. Panel A. Coronary angiography revealed proximal thrombotic occlusion of the left circumflex coronary artery (LCx), without collateral flow. Panel B. An intracoronary abciximab bolus (0.25 mg/kg body weight) was given immediately after the diagnostic angiograms. Thrombectomy with the export aspiration catheter (Medtronic Corporation, California, USA) resulted in proximal reperfusion, however, distal embolization occurred. Panel C. Despite multiple attempts at thromboaspiration, the distal thromboembolus remained. Panel D. The patient underwent direct stenting of the proximal LCx with a bare-metal stent. Panel E. Thrombolysis in myocardial infarction (TIMI) grade flow was zero in the distal LCx. Panel F. Five days later, repeat coronary angiography confirmed complete resolution of the thrombus with TIMI 3 flow in the LCx.

subsequent infusion may be useful for treating distal thromboaspiration catheter-related embolization.

Disclosure of interest

The authors declare that they have no conflicts of interest concerning this article.

Appendix A. Supplementary material

Supplementary data associated with this article can be found, in the online version, at [doi:10.1016/j.acvd.2011.07.006](https://doi.org/10.1016/j.acvd.2011.07.006).