IMAGES IN CARDIAC SURGERY



Emergency CABG for a migrated stent in a COVID-19 positive patient

Juan F. Parra MD¹ | Eric E. Vinck MD² | Oscar Sánchez MD¹ | Andrés F. Jiménez MD¹ | Federico Núñez MD¹

Correspondence

Eric E. Vinck, MD, Division of Cardiovascular Surgery, Clínica Cardio VID, Medellín 050031, Colombia.

Email: evinck518@gmail.com

Abstract

Percutaneous coronary interventions (PCI) have become a standard of treatment worldwide. Despite high safety rates, iatrogenic complications caused by stent dislodgements do exist in 0.21% of cases and most require emergency coronary artery by-pass grafting (CABG). Here we present a case of a coronavirus disease 2019 positive 40-year-old male patient presenting with STEMI due to thrombotic lesions in his left coronary trunk. The patient is taken to PCI and stent placement. Stent dislodgement results in the need for emergency CABG and stent removal. Informed consent and ethics approval were obtained.

KEYWORDS

coronary artery by-pass grafting, COVID-19, stent migration

Percutaneous coronary interventions (PCI) have become a standard of treatment worldwide. Despite high safety rates, iatrogenic complications caused by stent dislodgements do exist in 0.21% of cases and most require emergency coronary artery by-pass grafting (CABG). 1,2 A 40-year old coronavirus disease 2019 positive male patient presented with an extensive inferior lateral wall STEMI and RBBB to our institution. Echocardiogram revealed an inferior and apical wall hypokinesia with a left ventricular ejection fraction of 55%. Coronary angiogram was performed using a right radial artery access along with intravascular ultrasound revealing thrombotic lesions in the left coronary trunk and anterior descending artery in addition to atherosclerotic lesions. A medicated stent was deployed into the left coronary artery and directed towards the anterior descending artery. A post-PCI angiographic computed tomography showed a dislodged left coronary stent into the aorta (Figure 1A). The patient was taken to an emergency CABG and stent retrieval using extracorporeal circulation

and cardiac arrest. An aortotomy revealed the migrated coronary stent into the aortic lumen (Figure 1B). The dislodged stent was extracted from the left coronary ostium (Figure 1C,D) and the left internal mammary artery was grafted to the anterior descending artery and saphenous vein to the ramus intermedius. The patient had an adequate recovery and was discharged.

INFORMED CONSENT

Informed consent obtained.

ETHICS STATEMENT

Ethics approval obtained.

ORCID

Eric E. Vinck http://orcid.org/0000-0002-9728-3910

Andrés F. Jiménez http://orcid.org/0000-0002-4359-9418

¹Division of Cardiovascular Surgery, Fundación Clínica Shaio, Bogotá, Colombia

²Division of Cardiovascular Surgery, Clínica Cardio VID, Medellín, Colombia

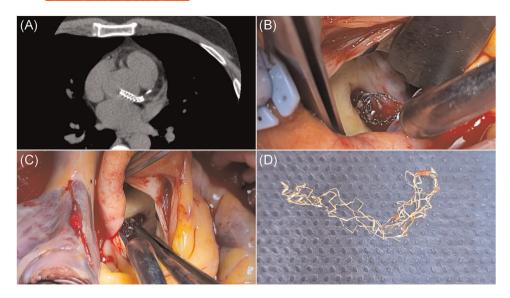


FIGURE 1 (A) Post-PCI angiographic computed tomography showing a dislodged left coronary stent into the aorta. (B) An aortotomy revealed the migrated coronary stent into the aortic lumen. (C, D) The dislodged stent was extracted from the left coronary ostium. PCI, percutaneous coronary intervention

REFERENCES

- Ibrahim KS, Alwaqfi NR, Ibdah RK. Coronary artery bypass as a treatment of stent dislodgement: a case report. Ann Med Surg. 2019; 47:47-49.
- Castiglioni A, Verzini A, Macchi A, Alfieri O. Surgical emergency due to coronary stent migration. Eur J Cardiothorac Surg. 2004;25(4):646-647.

How to cite this article: Parra JF, Vinck EE, Sánchez O, Jiménez AF, Núñez F. Emergency CABG for a migrated stent in a COVID-19 positive patient. *J Card Surg.* 2021;36: 2933-2934. https://doi.org/10.1111/jocs.15523