

Cuban Society of Cardiology

Images in Cardiology



Very late stent thrombosis? Beyond the angiography

¿Trombosis muy tardía de stent coronario? Más allá de la angiografía

Teresa Alvarado, MD; Paula Antuña, MD; and Fernando Rivero[™], MD

Department of Cardiology. Hospital Universitario de la Princesa. Madrid, Spain.

Este artículo también está disponible en español

Key words: Stent thrombosis, Acute coronary syndrome, Coronary angiography, Optical coherence tomography Palabras Clave: Trombosis de stent, Síndrome coronario agudo, Angiografía Coronaria, Tomografía de coherencia óptica

The patient is a 60-year-old man with history of hypertension, dyslipidemia and ischemic heart disease, the latter with debut 8 years earlier for unstable angina; back then, a coronary angiography was performed, which showed right coronary artery (RCA) disease: an ectatic vessel, with important positive remodeling and severe lesions on its distal segment and in the proximal of posterolateral branch. He was immediately implanted two bare metal stents. Since then, the patient remained asymptomatic, with good control of the cardiovascular risk factors. The current admission was for an acute coronary syndrome with ST-segment elevation in the inferolateral region. An emergency coronary angiography was carried out, that demonstrated a complete thrombotic occlusion of the middle RCA (Figure 1A). With an initial diagnosis of a very late stent thrombosis, a thromboaspiration was performed, that allowed the extraction of macroscopic thrombotic material and the recovery of the distal flow (Figure 1B). An intra-arterial optical coherence

tomography (OCT) was carried out in order to elucidate the existence of mechanical trigger factors (Figure 2). The OCT shows the existence of broken atherosclerotic plaque, with great thrombotic content, located in the area between the two previously implanted stents (Figure 2, white and yellow), which are well expanded and endothelialized (Figure 2,

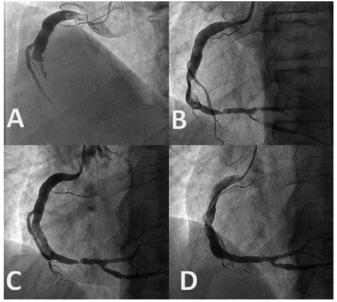


Figure 1.

☑ F Rivero
Hospital Universitario de la Princesa
Servicio de Cardiología
Calle de Diego de León 62, 28006 Madrid, España
E-mail address: feriver@gmail.com

blue and pink). Given the high thrombotic load, multiple thromboaspirations were performed, which allow decreasing it, and restoring the normal epicardial flow (Figure 1C). A conservative treatment was applied with triple antiaggregation (aspirin 100 mg/day, prasugrel 10 mg/day, and abciximab in continu-

ous intravenous infusion for 12 hours) and anticoagulation (enoxaparin 80~mg/kg every 12 hours) during five days, after which there was applied the deferral interventional treatment of the residual lesion with a 4.0~x 12 mm bare metal stent (Figure 1D). The patient was discharged without further incidents.

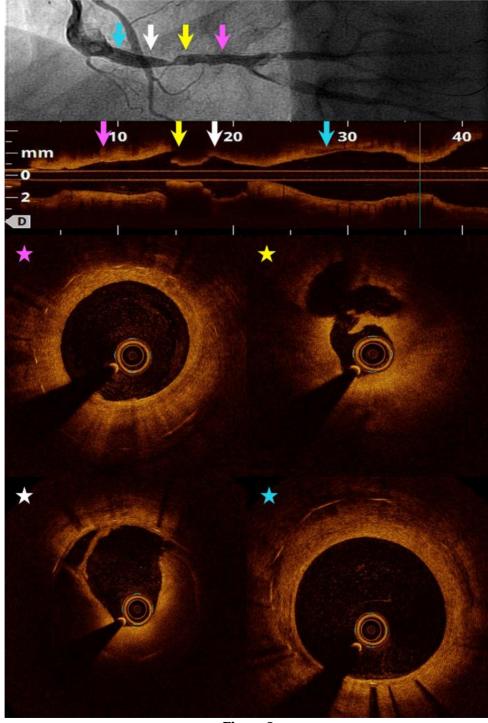


Figure 2.