

Fusiform mid-LAD aneurysm due to passive arterial wall dilatation after implantation of a self-expandable stent

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Coronary artery aneurysm formation following percutaneous coronary intervention (PCI) with drug-eluting stents is a known, infrequent complication, causing late acquired strut malapposition, a potential trigger for in-stent thrombosis [1]. First generation durable-polymer sirolimus-eluting stents showed a significant association with coronary evaginations on optical coherence tomography (OCT), probably related to the inflammatory and durable polymer [2].

The Xposition S is a sirolimus-eluting self-apposing coronary stent with a durable polymer that, by passively adapting to variances in vessel diameter, allows for maximal stent apposition.

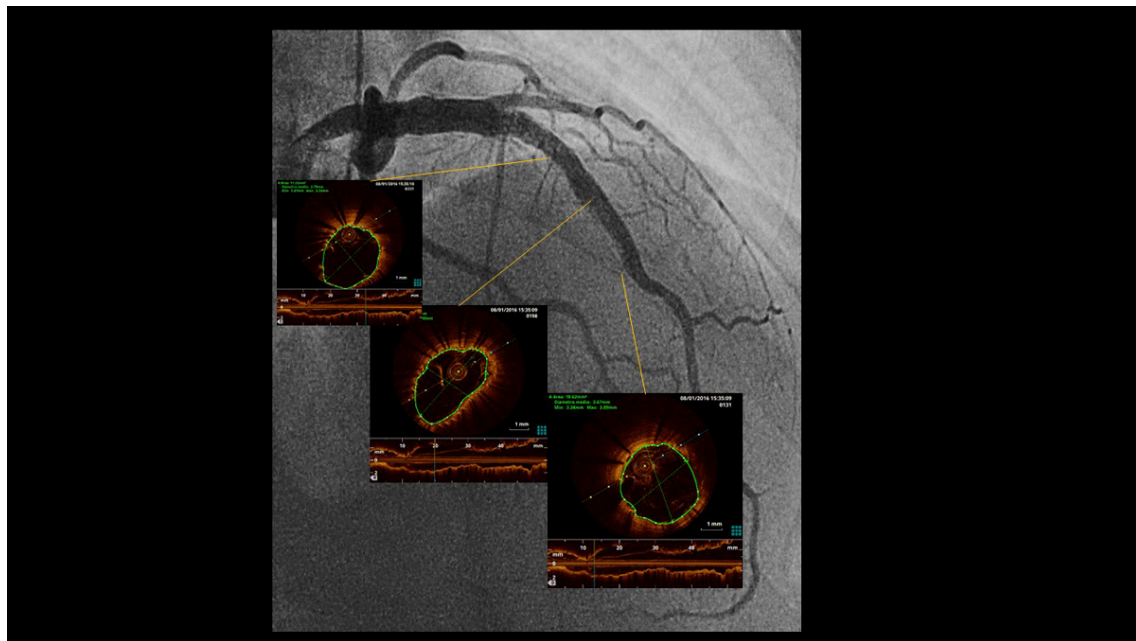
We herein report the case of a late acquired fusiform aneurysm of the mid-left anterior descending artery (LAD)

caused by the passive arterial wall dilatation as a consequence of the implantation of a self-expandable stent.

A 61-year-old patient, with known coronary artery disease, underwent PCI with a self-expandable stent (Stentis XPOSITION S 3.5–4.5 × 27 mm) for an anterior non-ST segment elevation myocardial infarction (NSTEMI) in January 2016. Post-implant OCT showed good apposition of the stent, with a mean vessel diameter of 3.57 mm at the distal edge and 3.67 mm at the proximal edge (fig. 1)

Because of recurrent angina, check-up angiography was performed in March 2018. A fusiform aneurysm of the mid-LAD was discovered. Intravascular ultrasound revealed a uniform dilatation of the vessel with a calibre of 6 mm throughout the whole stented segment, with no ev-

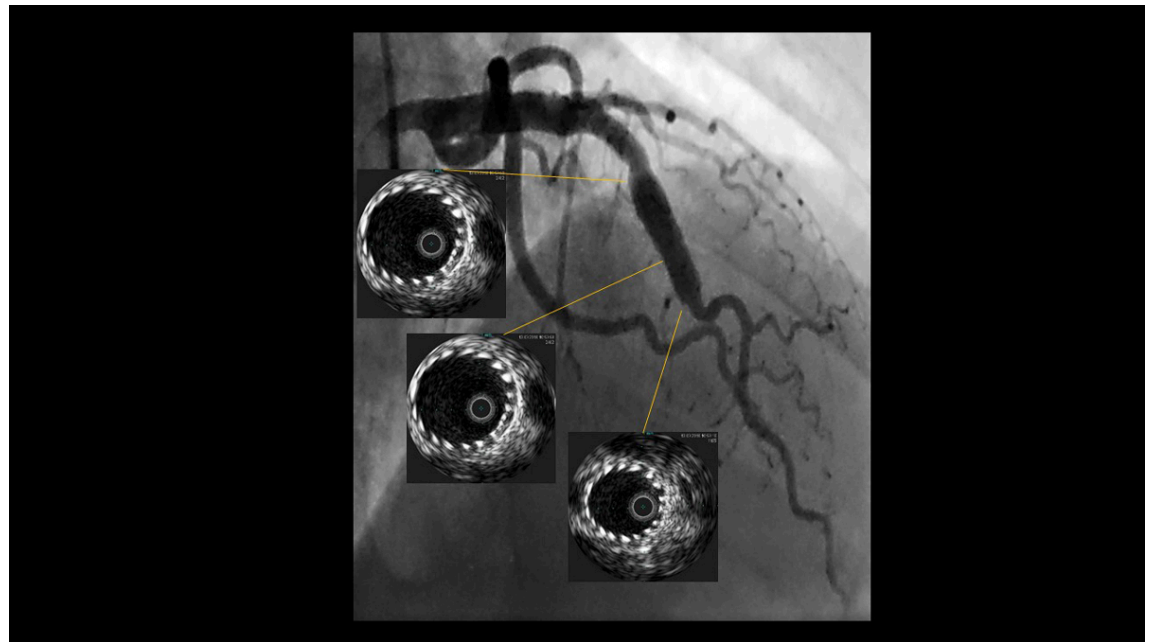
Figure 1: Post-implant optical coherence tomography (January 2016): good apposition of the stent with a mean vessel diameter of 3.57 mm at the distal edge and 3.67 mm at the proximal edge.



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Figure 2: Intravascular ultrasound (March 2018): evidence of fusiform aneurysm of the mid-left anterior descending artery, with uniform dilatation of the vessel with a calibre of 6 mm throughout the whole stented segment.



idence of late acquired malapposition (fig. 2), confirming angiographic findings.

This case represents a new, previously undescribed complication after implantation of self-expandable stent, which caused passive arterial wall dilatation.

Disclosure statement

No financial support and no other potential conflict of interest relevant to this article was reported.

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