

TIMI 0 in a hiperdynamic muscular bridge: a case report and review of successful endovascular managment

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Case presentation:

- 38 year old female patient.
- Antecedent of idiopathic myocarditis and systemic arterial hypertension, unstable angina, wich progressively increased in intensity and duration, sinus bradychardia, elevation of CKMB



Treatment

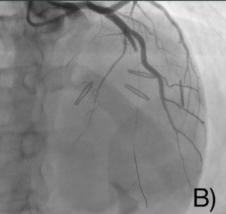
A 2.5 x 16 mm CRe8 EVO stent was successfully deployed and inflated to 10 atm. TIMI grade 3 flow was achieved throughout the lesion and proximal segment, with no evidence of vasoreactivity upon stent deployment or myocardial bridge opening. TIMI grade 3 flow was confirmed.

Further diagnostic workup

Following aseptic and antiseptic preparation of the radial region, 2% lidocaine was infiltrated. Using the Seldinger technique, a 6-Fr introducer sheath was successfully advanced. Over a Teflon-coated guidewire, a Voda Curved 3 catheter was navigated to selectively cannulate the left coronary system, specifically the LAD. Quantitative coronary angiography (QCA) revealed a 91% stenosis in the LAD, demonstrating significant vasoreactivity.

IVUS imaging confirmed the presence of a myocardial bridge with a minimal luminal area of 2.2 mm². During subsequent manipulation, a transient loss of flow in the LAD was observed, which resolved following the administration of 200 mcg of adenosine. Due to the vessel's high vasoreactivity, a 2.5-mm balloon catheter was prepared alongside a second insufflator. Additionally, a safety pacemaker was prophylactically inserted into the right ventricle via right femoral vein.







Conclusions

This case reinforces the growing recognition of myocardial bridging as a clinically significant condition that can lead to ischemia and associated symptoms. It also highlights the efficacy of PCI as a treatment modality capable of addressing the mechanical and ischemic complications of miocardial bridge.

References

