An Interesting Presentation of Angina Due to Left Posterolateral to Right Posterolateral Coronary Artery Fistula

Vivek Nadipalli, Ahmed Mahmood, Muhammad Uzair Lodhi, Bilal Hussain, Sohail Khan, Christel Cuevas, Thomas Alexander

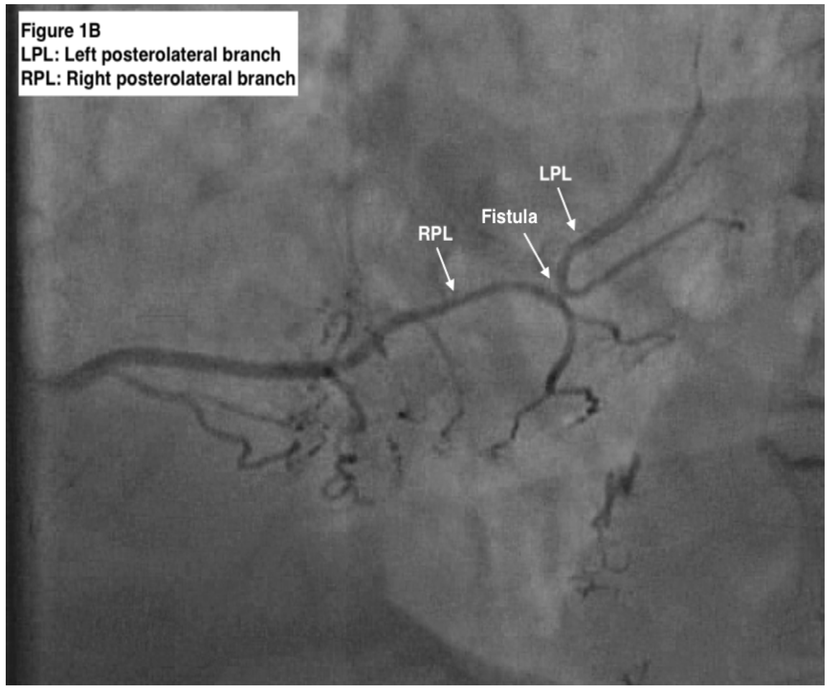
CORPUS CHRISTI MEDICAL CENTER
An HCA Affiliated Hospital

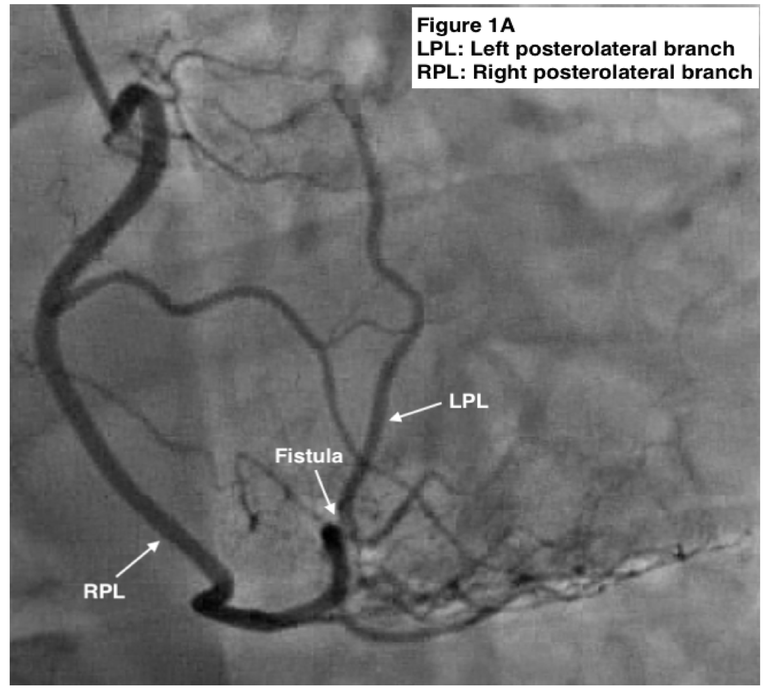
Background

- Arterial-to-arterial fistula between right posterolateral and left posterolateral coronary arteries is rare and available literature on it is scarce.

Case Presentation

A 60-year-old male with type 2 diabetes mellitus and dyslipidemia presented with shortness of breath and chest tightness. Given his symptoms and poor functional status, myocardial perfusion imaging with regadenoson was performed. The myocardial perfusion imaging study was abnormal with evidence of ischemia in the inferoseptal myocardium. The patient proceeded to the cardiac catherization lab for selective right and left coronary angiography. Contrast injection revealed non-obstructive coronaries; however, an arterial-to-arterial fistula between the right posterolateral (RPL) branch and left posterolateral (LPL) branch was present (Figure 1A and 1B). Further characterization of the fistula showed the presence of left-to-right and right-to-left filling, indicating a LPL to RPL coronary artery fistula (CAF). The patient was managed conservatively with aspirin, statin, and anti-anginal therapy.





Conclusion

- There remains a need for diagnostic and therapeutic guidelines to address coronary artery fistula (CAF). Conservative treatment is an option for small CAFs and serves as a potential alternative to catheter-based and surgical closure.

Contact Info

Twitter: @ahmedmahmoodmd
Email: Ahmed.Mahmood@hcahealthcare.com

This research was supported (in whole or in part) by HCA Healthcare and/or an HCA Healthcare affiliated entity. The views expressed in this publication represent those of the author(s) and do not necessarily represent the official views of HCA Healthcare or any of its affiliated entities.

HCA Healthcare®