

# Insights of Optical Coherence Tomography in Renal Artery Fibromuscular Dysplasia in a Patient with Spontaneous Coronary Artery Dissection

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A 60-year-old woman was admitted for an acute coronary syndrome. Coronary angiography showed a spontaneous coronary artery dissection (SCAD) in the left anterior descending coronary artery (A). A typical image of fibromuscular dysplasia (FMD) was also observed in the right renal artery (B). Optical coherence tomography (OCT) (C) revealed alternating areas of thickening and thinning of the medial layer, corresponding to the typical image of "string of beads" readily identified in the longitudinal reconstruction of the OCT and also in angiography.

A very high prevalence of FMD in non-coronary arteries has been recently reported in patients with DCE. Our findings suggest that OCT may provide unique diagnostic clues in these challenging patients.

## Keywords

Optical Coherence Tomography.

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## Author contributions

Conception and design of the research, Acquisition of data, Analysis and interpretation of the data and Critical revision of the manuscript for intellectual content: Bastante T, Alfonso F; Writing of the manuscript: Bastante T.

## Potential Conflict of Interest

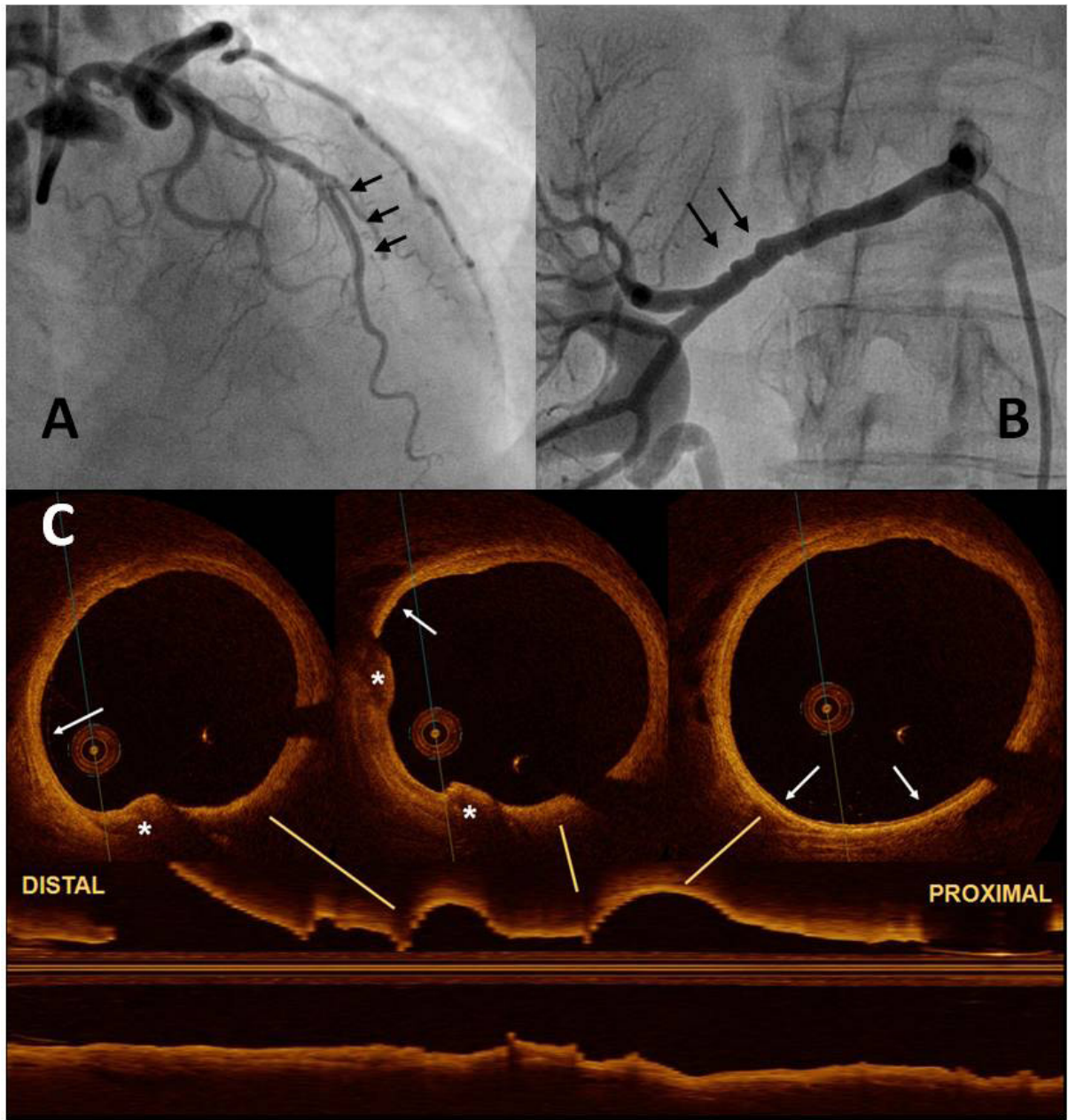
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## Study Association

This study is not associated with any thesis or dissertation work.



**Figure 1** – Panel A: Coronary angiography showing a linear filling defect in left anterior descending coronary artery, corresponding with the SCAD (arrows). Panel B: Renal artery angiography disclosing the typical image of FMD (arrows). Panel C: OCT of renal the artery depicting the characteristic areas of thickening (asterisks) and thinning (arrows) of the middle layer.