

Image in cardiology

Double gender bias in spontaneous coronary artery dissection

Doble sesgo de género en disección coronaria espontánea

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Received 28 July 2023; Accepted 29 August 2023

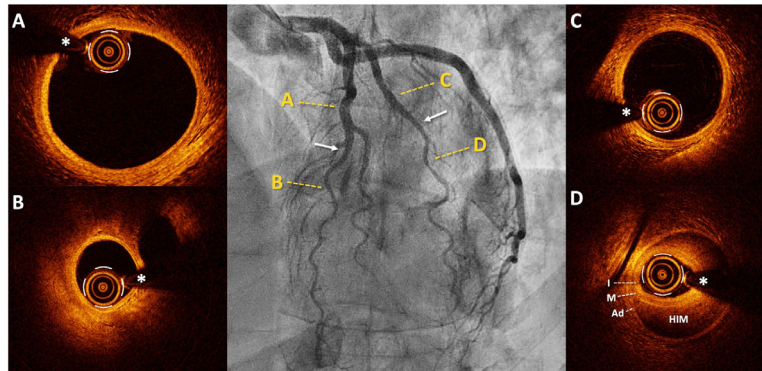


Figure 1.

A 51-year-old man with a history of diabetes mellitus and smoking was admitted for non-ST-elevation myocardial infarction. Coronary angiography showed tortuous arteries, but no lesions, except for a loss of caliber in the left anterior descending (LAD) artery and diagonal branch (D1) (figure 1, arrows; asterisk: guidance artifact). Both vessels displayed distal diffuse stenosis without change after the administration of intracoronary nitroglycerin. Optical coherence tomography (OCT) assessment of the LAD showed a healthy proximal vessel (figure 1A) with a striking decrease in the total mediolateral vascular area (figure 1B), without associated pathological images. However, despite a similar angiographic image, OCT of D1 demonstrated a healthy proximal artery (figure 1C), but with a clear distal intramural hematoma (figure 1D, IMH), with perfect definition of the intimal, medial, and adventitial layers (figure 1D: I, M, and Ad).

Conservative treatment was chosen. The diagnosis of spontaneous coronary artery dissection (SCAD) can be very complex. Epidemiology is relevant, especially in terms of sex, given the predominance of the condition in women. If our patient had been female, the angiographic image of the LAD would have been sufficient to establish the definitive diagnosis of SCAD. However, in a male smoker with diabetes, the probability of SCAD is very low. Diagnostic suspicion was crucial to confirming the diagnosis of SCAD in D1. This case illustrates the relevance of OCT for the unequivocal diagnosis of SCAD and also alerts us to the possibility of gender bias in this condition with possible overdiagnosis in women and underdiagnosis in men.

FUNDING

None declared.

ETHICAL CONSIDERATIONS

We obtained informed consent from the patient for this work. Approval by an ethics committee was not needed. Sex and gender variables were taken into account.

STATEMENT ON THE USE OF ARTIFICIAL INTELLIGENCE

Artificial intelligence was not used in the development of this work.

AUTHORS' CONTRIBUTIONS

All authors contributed to the writing, conception, and revision of the manuscript.

CONFLICTS OF INTEREST

None declared.

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Available online 29 October 2023