

Intramural hematoma

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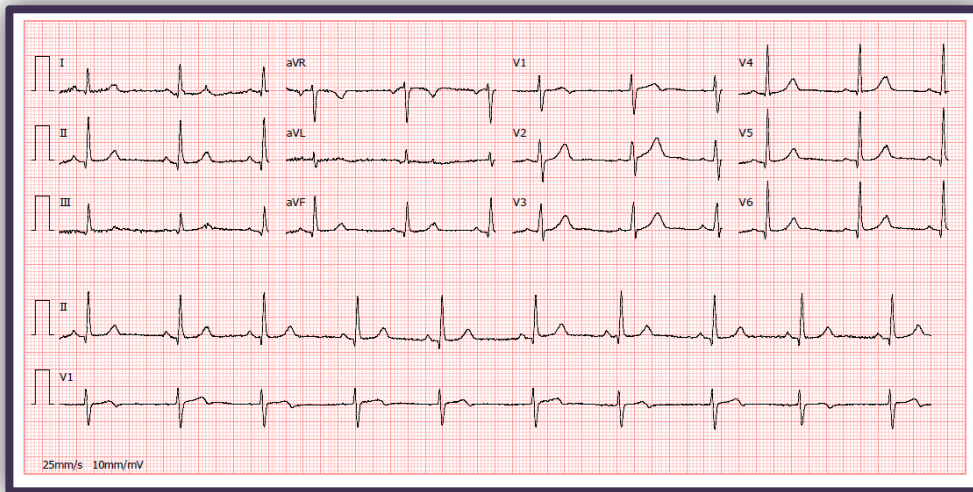
Potential conflicts of interest

Speaker's name: Carlos Galvão Braga

I do not have any potential conflict of interest

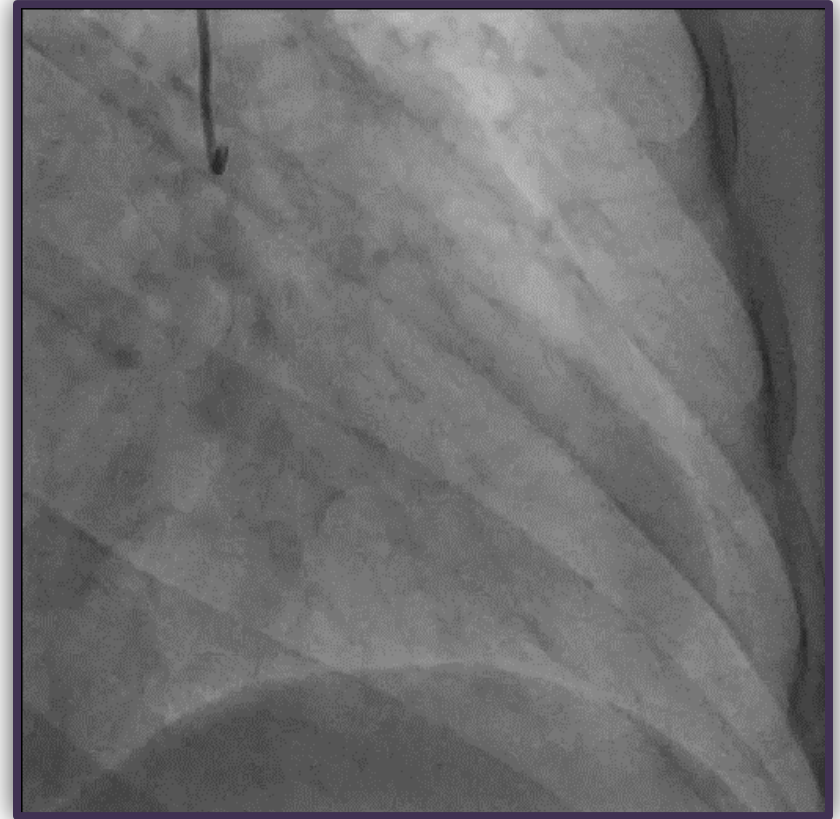
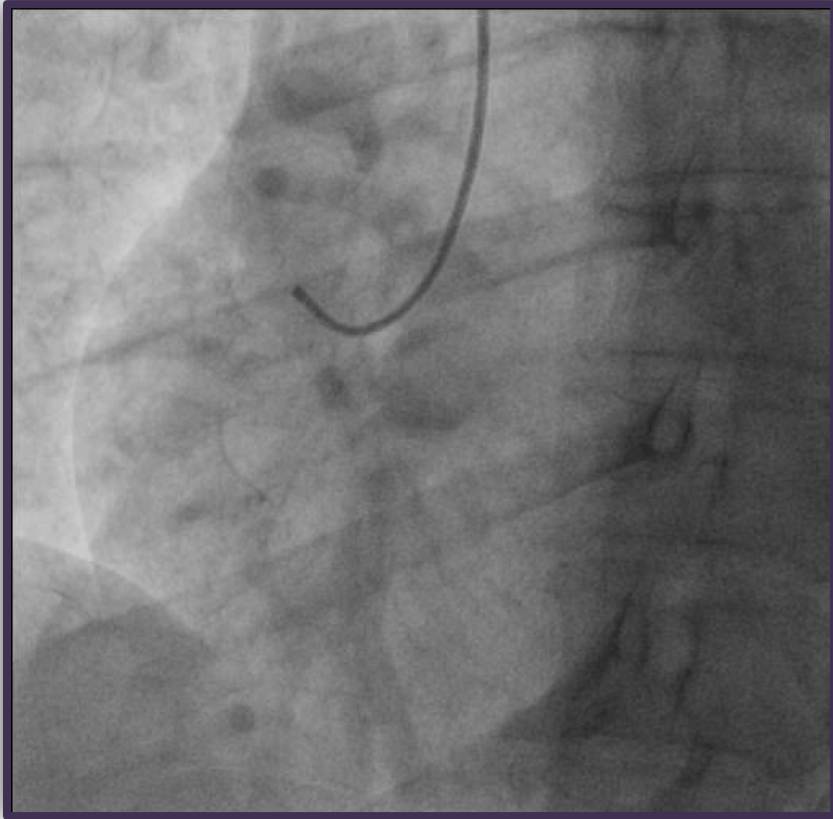
Case report

- 53 year old female
- Without known vascular risk factors
- Presented to the hospital with chest pain (1 hour of evolution)



- Troponin I 0.88 ng/mL
- Echo: normal.

Coronary angiography



- Radial artery access with a 6F JR 4.0 and a 6F JL 3.5 catheters
- Normal and dominant right coronary artery
- Normal left anterior descending artery
- Sudden reduction of the distal circumflex diameter (like a long and diffuse stenosis), suggestive of intramural hematoma

Intravascular ultrasound



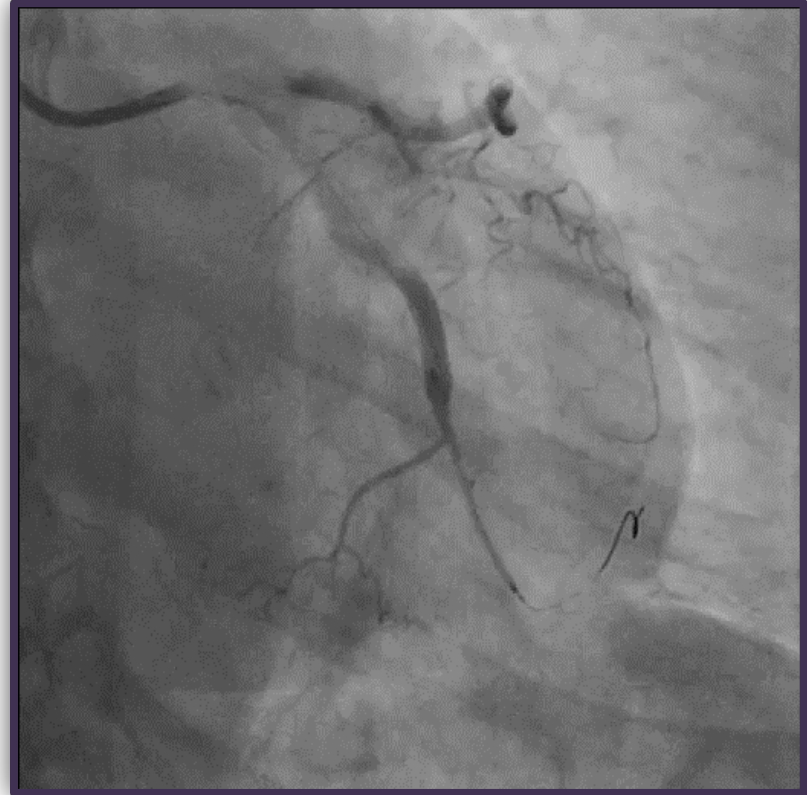
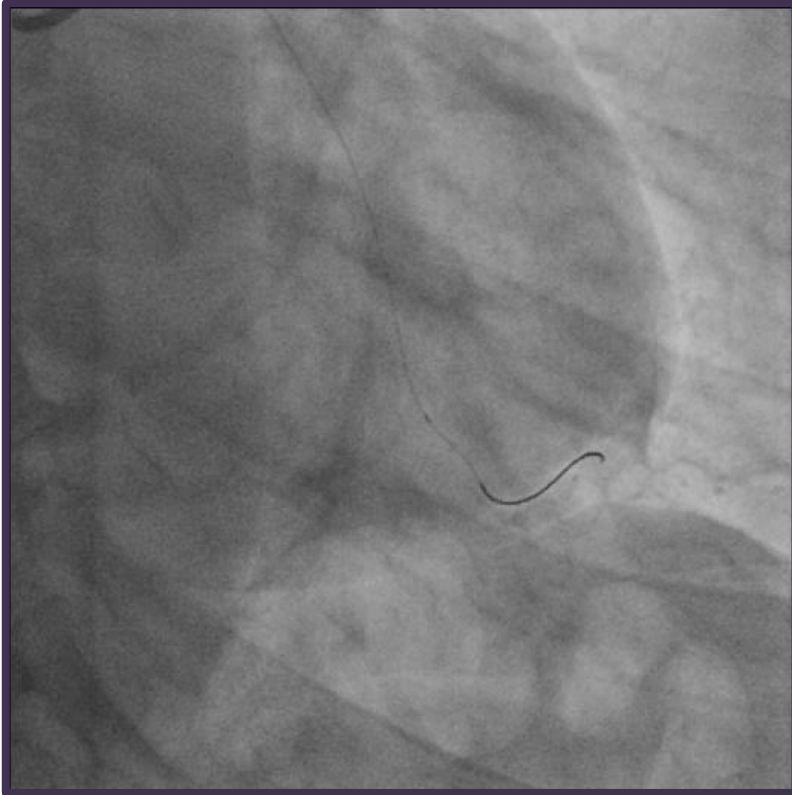
- Intravascular ultrasound revealed false lumen thrombosis in the distal circumflex, but did not show an intimal tear
- Since the patient was stable and asymptomatic, medical treatment was initially maintained with dual antiplatelet therapy

Recurrence of chest pain during hospital stay



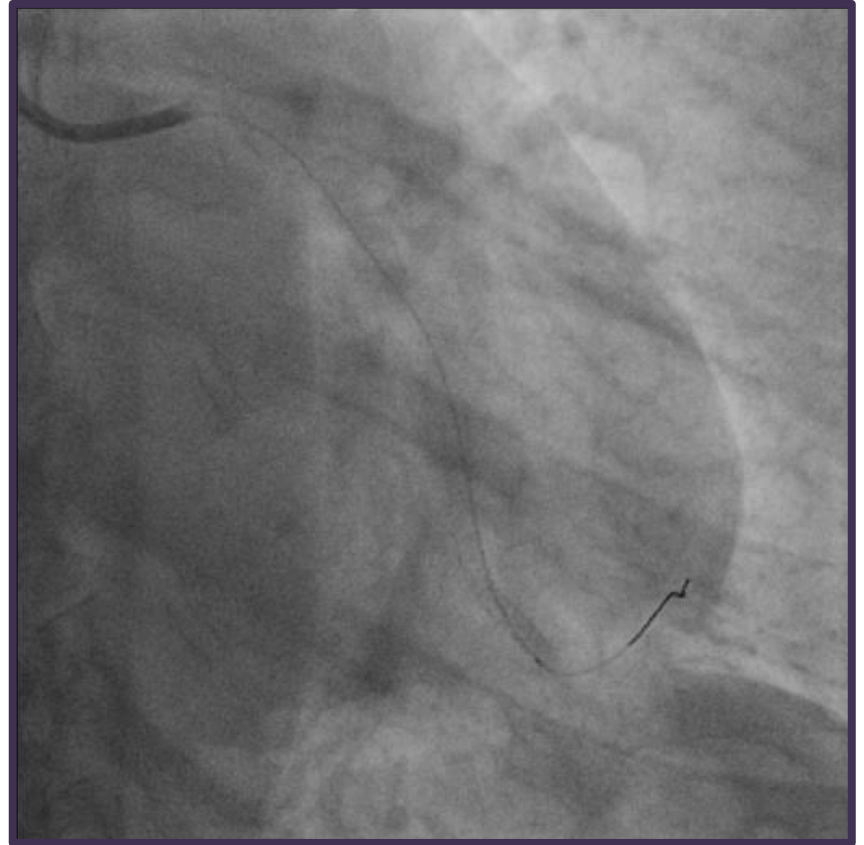
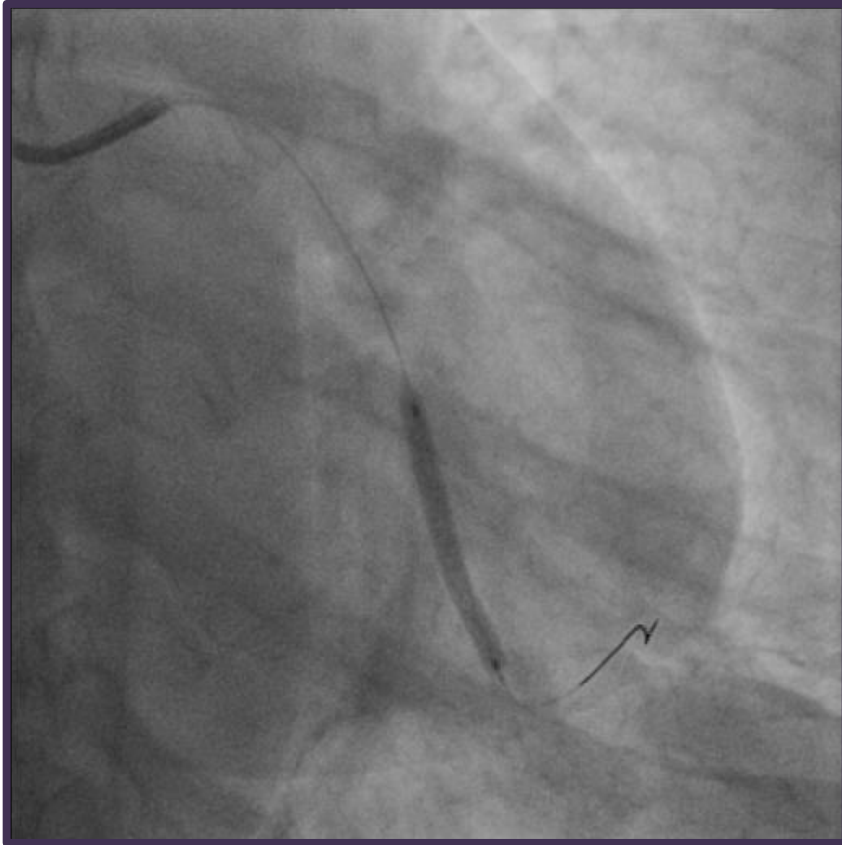
Coronary angiography was repeated

Percutaneous coronary intervention



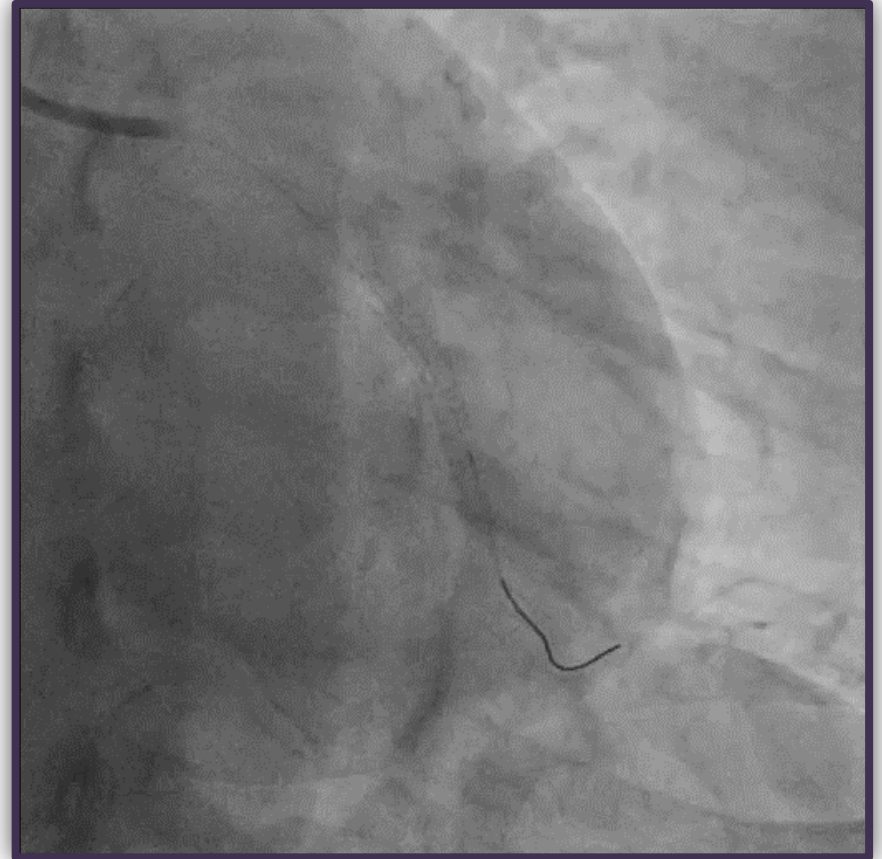
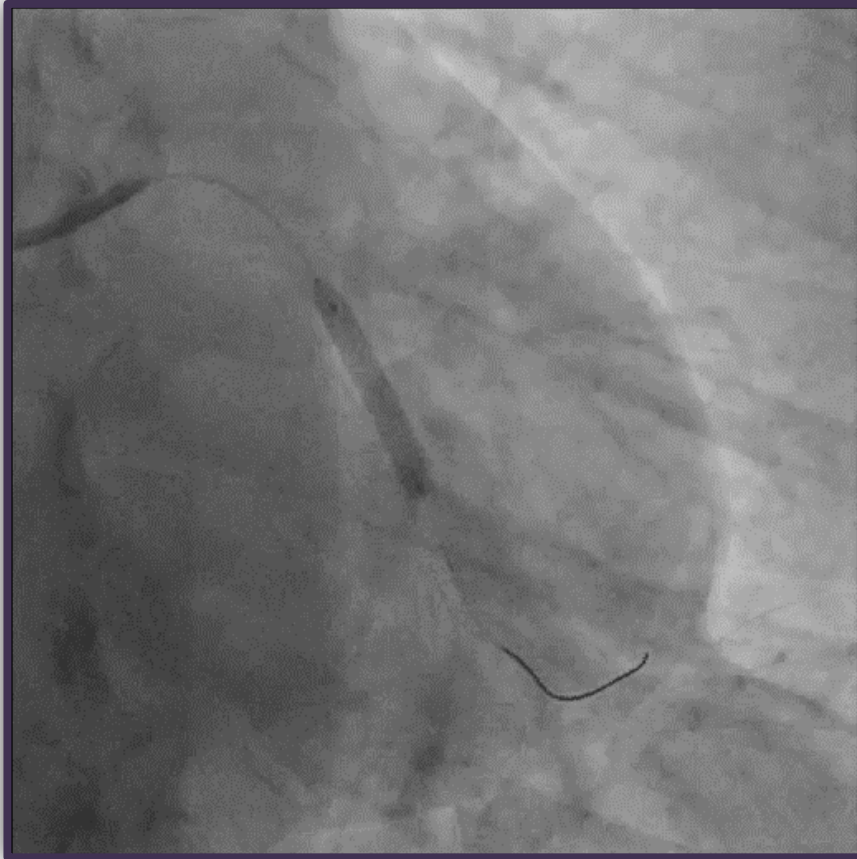
- Radial artery access with a 6F JL 3.5 guiding catheter
- Coronary angiography was similar; it was decided to revascularize percutaneously the artery
- BMW wire was crossed with success through the true lumen of the circumflex

Percutaneous coronary intervention



- Initially, a drug eluting stent 3.0 x 33 mm was implanted at the site of intramural hematoma
- Proximal progression of intramural hematoma was seen on angiography

Percutaneous coronary intervention



- Then, a second drug eluting stent 3.5 x 20 mm was implanted juxtaposed to the previous one, with good final result

Conclusion

■ “There are 2 proposed mechanisms of spontaneous coronary artery dissection (SCAD): (1) initiation of a medial dissection and hemorrhage by an intimal tear and creation of a false lumen; (2) an intramedial hemorrhage without an intimal tear causing a medial dissection, perhaps caused by rupture of the vaso vasorum.”

Jacqueline Saw *et al*, Canadian Journal of Cardiology, 2013

■ “Coronary angiography remains the main diagnostic tool for the diagnosis of SCAD (...) In most cases, the angiographic narrowing caused by an intramural hematoma impinging into the lumen is misinterpreted as atherosclerotic disease. IVUS and, more recently, OCT, have become established as valuable novel intracoronary tools in the diagnosis of this entity.”

Fernando Alfonso *et al*, Circulation Journal, 2014

■ “The decision to revascularize the dissected coronary artery depends on the patient’s clinical status and affected coronary segments. In most cases, conservative treatment is preferred for stable patients without ongoing pain. Patients with ongoing chest pain, ischemia, ST elevation or hemodynamic instability should undergo PCI.”

Jacqueline Saw *et al*, Canadian Journal of Cardiology, 2013