



Acute coronary syndrome due to giant coronary artery aneurysm

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CONFLICT OF INTEREST

NONE

Case presentation

- AXP, male, 65 years old, married, catholic, white, lawyer
- Typical thoracic pain for 1 hour
- Electrocardiogram: no ischemia
- Medical history: Hypertension, Diabetes Mellitus, smoking
- Medicine: aspirin, ticagrelor, beta blocker, vastatin, enoxiparin
- Laboratory tests: elevated troponin
- Echocardiogram: Inferior akinesia

Coronary angiography (Twenty four hours after first medical contact)

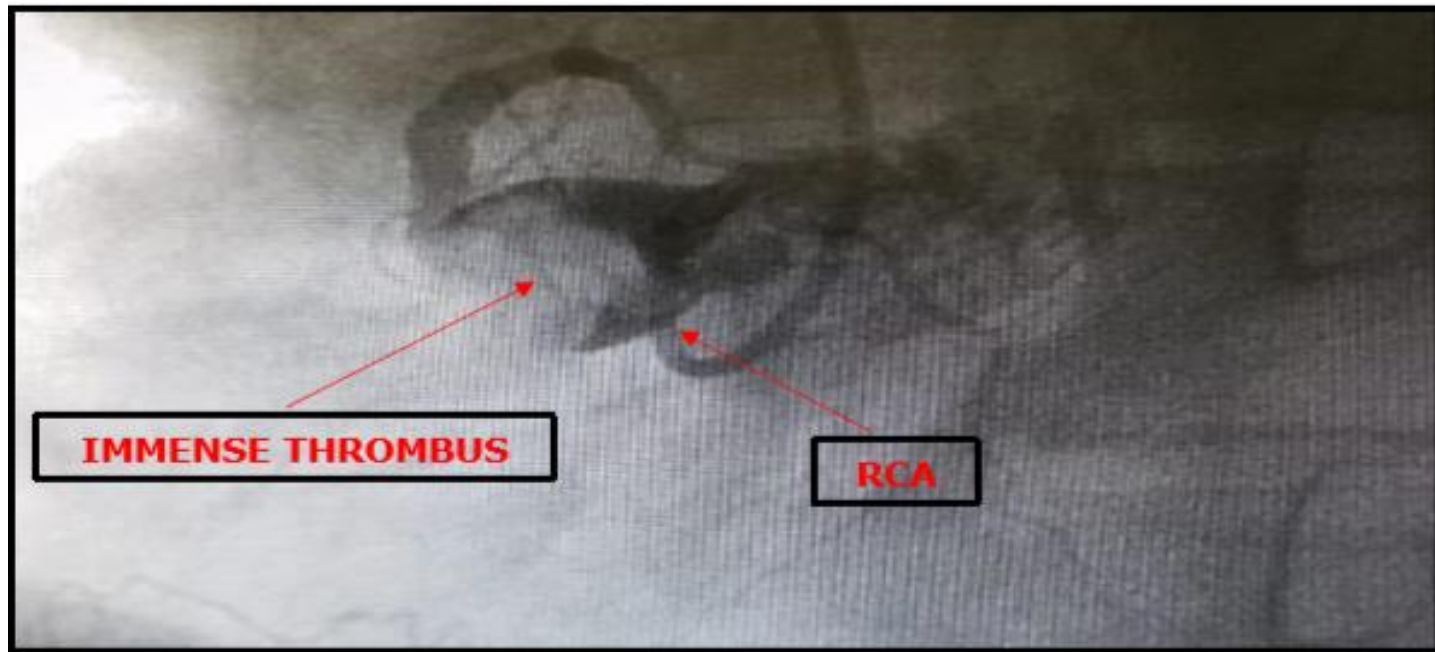


Figure 1. Giant coronary aneurysm with thrombus leading to right coronary artery (RCA) occlusion.

Coronary angiography (twenty four hours after first medical contact)

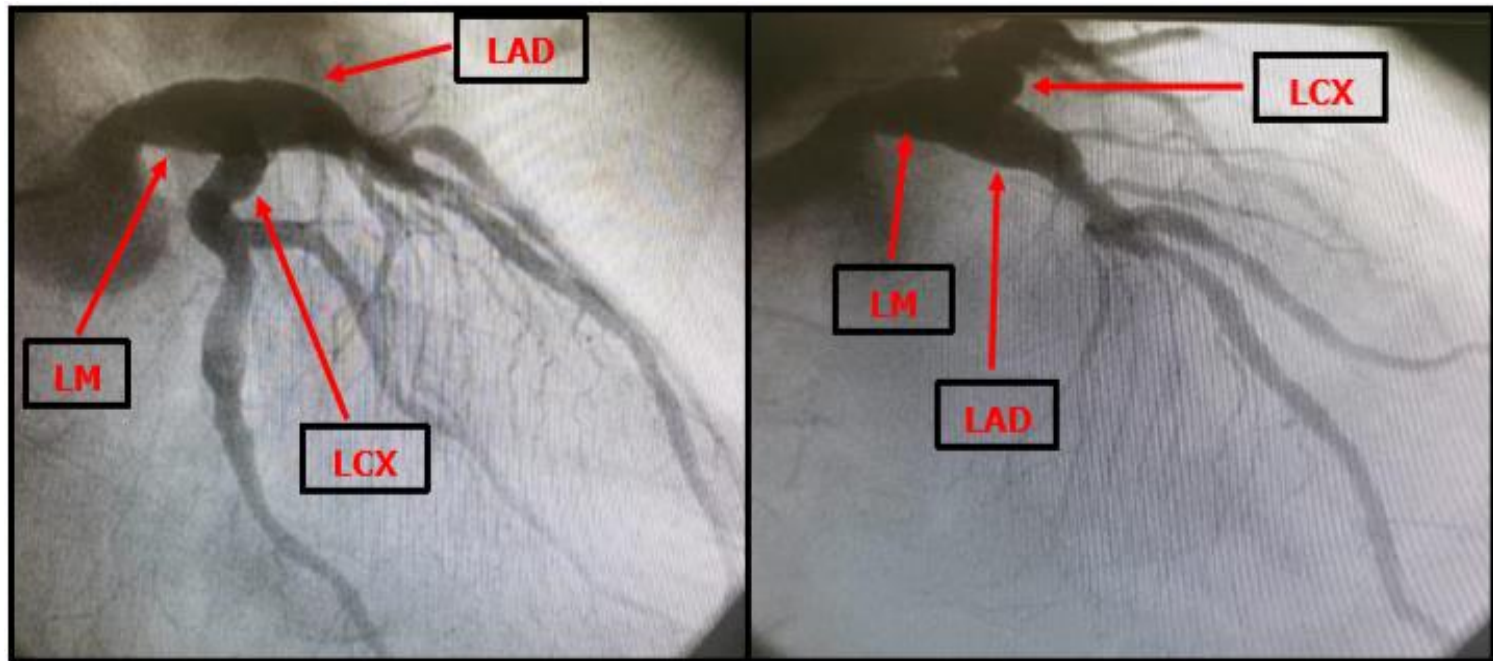


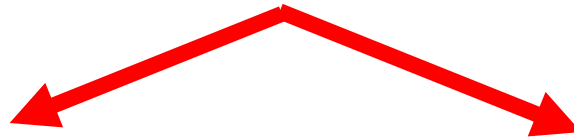
Figure 2. Aneurysms: Left main (LM) and left anterior descending artery (LAD).
Ectasia: Left circumflexa artery (LCX)

Management:

Giant coronary aneurysm (15 mm) with thrombus (24 hours of occlusion)



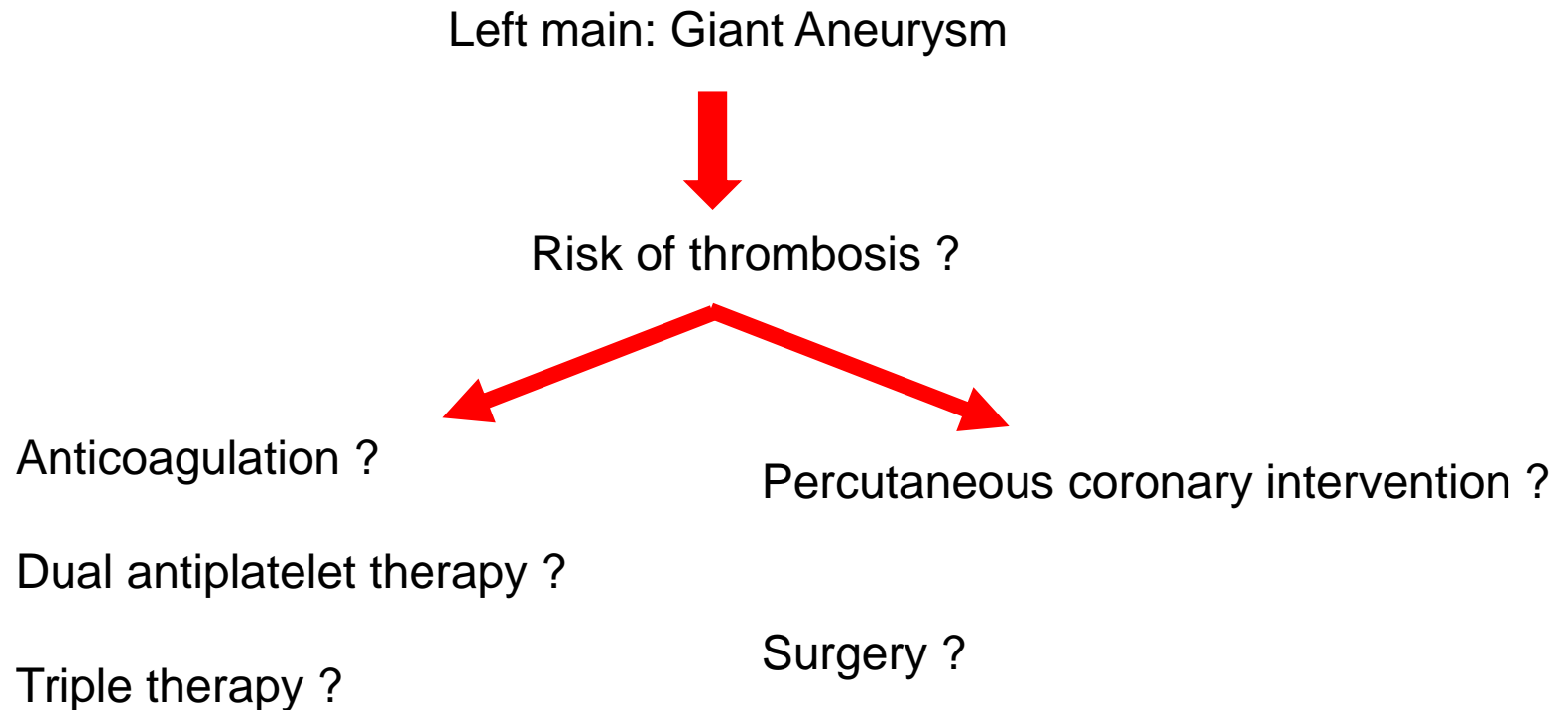
Percutaneous coronary intervention: benefit vs risks



To save muscle

Type of stent, distal embolisation,
reduction of flow, thrombosis, rupture,
malapposition, restenosis, etc

Management:



Heart Team decision:

Surgery: Ligation of the aneurysms +
coronary artery bypass graft

* Ticagrelor was stopped according guidelines

Discharge and follow up

- Asymptomatic
- Aspirin, ticagrelor, vastatin, beta blocker, ACE inhibitor
- Referred for cardiac rehabilitation
- Six month follow up: asymptomatic

CONCLUSIONS

- Giant coronary artery Aneurysm (GCAA): Different definitions (≥ 20 mm, ≥ 8 mm or ≥ 4 times adjacent diameter)
- GCAA management: There is no recommendation based on guidelines
- If PCI is planned: Intravascular ultrasound is recommended
- Treatment: Clinical, PCI or surgery
- Surgery: Ligation or excision + revascularization
- Coronary artery aneurysm: Treatment should be individualized (ex: size, position, speed of growth, Heart team experience, etc)