DIFFICULT SITUATION IN 1RY PCI

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65 Y old female

- HTN, not DM
- Hepatic, upper GIT bleeding, upper GIT endoscopy sclerotherapy 1month ago
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Chest pain 60 min ago.

- Clinical examination:
- Average general condition
- Pulse: 90b/m regular equal in both side with intact peripheral pulsation
- BP: 140/80 mmhg.
- RR: 18 c/m
- There is bilateral VV in both lower limbs

- **ECG.**
- NSR, Q II,III,AVF, V1- V4
- T wave inversion V1- V6,II,III, AVF
- **Echo:**
- Dilated dimensions, impaired function EF=45%
- RWMA in the form of Akinesia at apex, mid septum, hypokinesia of inf wall, post.wall mild MR, mild AR and mild TR
- Cardiac biomarker: elevated

MEDICATION

*ASA

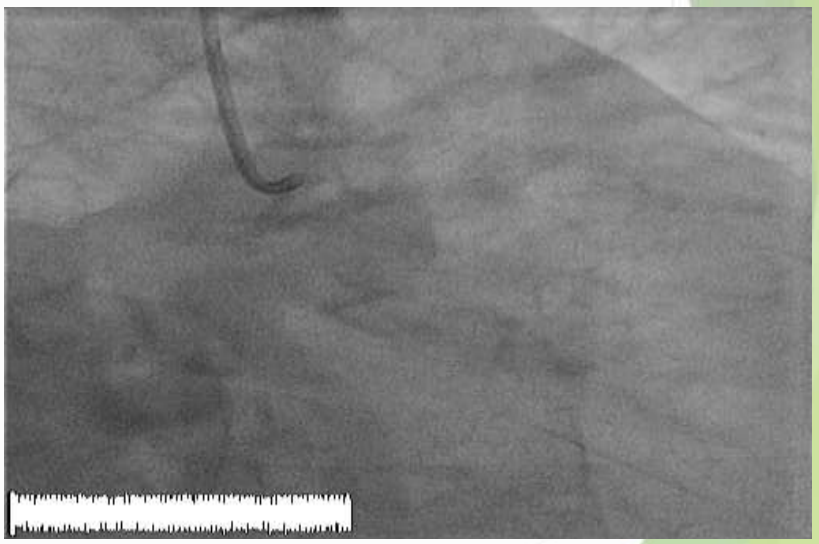
*Nitrates

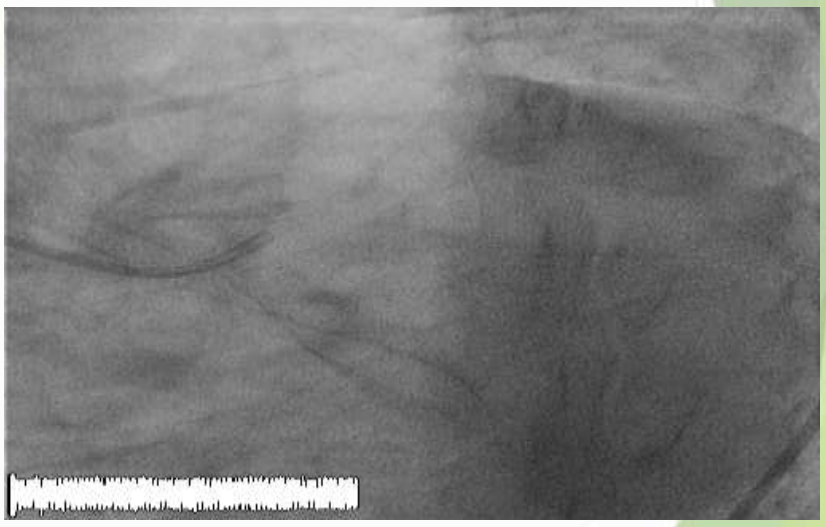
*ACEI

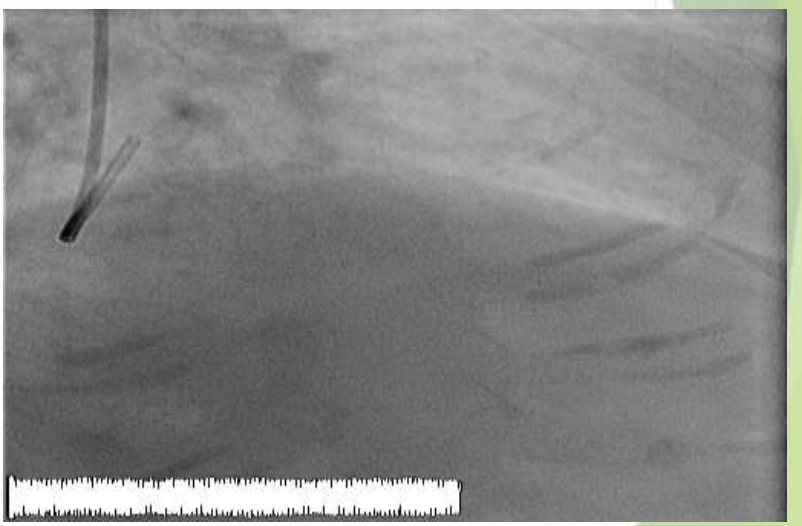
*BB

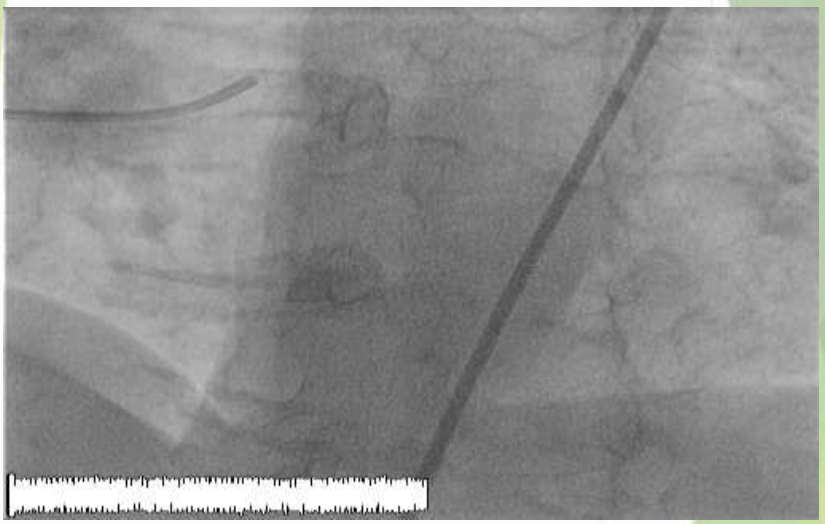
*Proton pump inhibitor

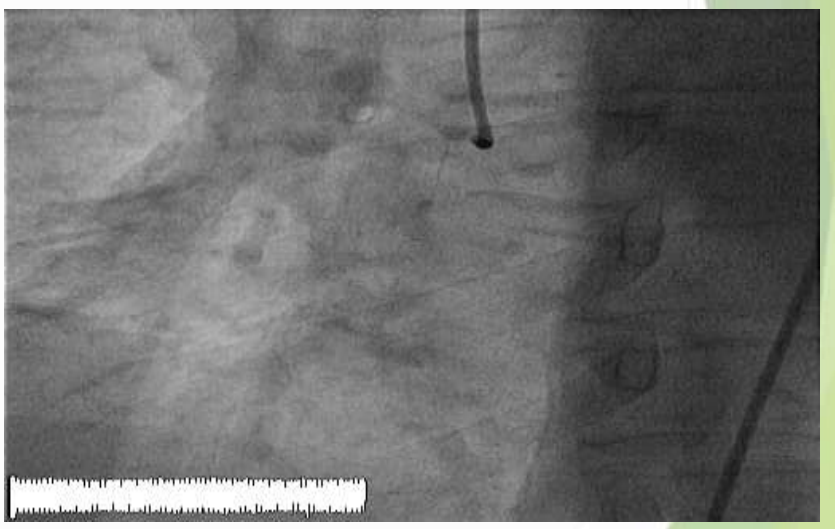
CA was decided

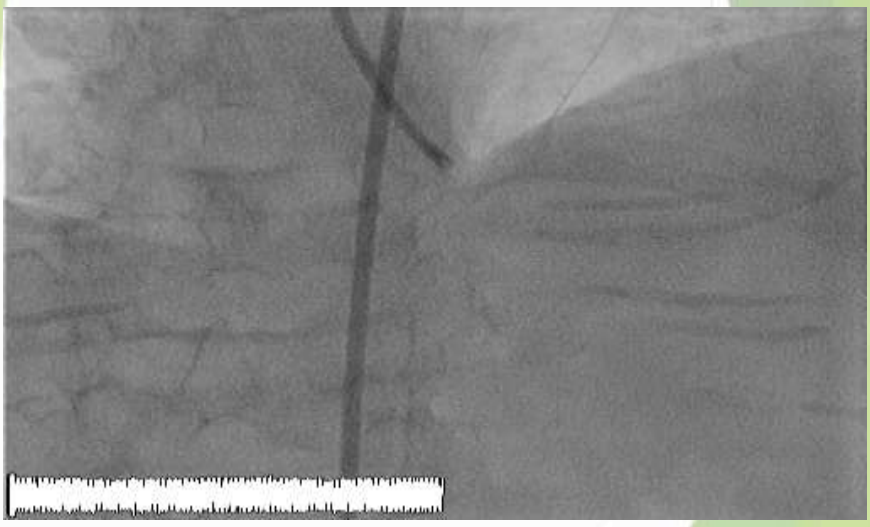


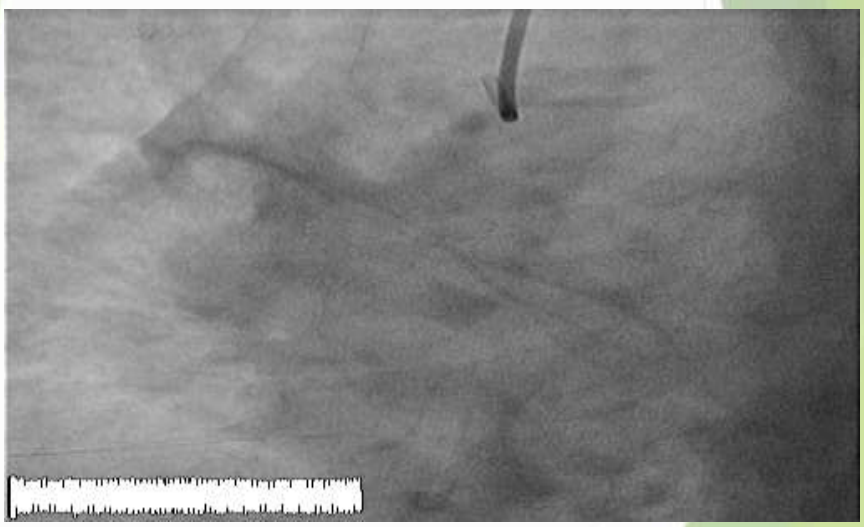













OH MY GOD

- What is this????
- What to do???

Plan of management

- Coronary interventions
- Surgical management
- Medical management

Spontaneous coronary artery dissection

- spontaneous coronary artery dissection (SCAD) is an uncommon and poorly understood cause of ACS, AMI and sudden cardiac death.
- (SCAD) is a sudden separation between the layers of a coronary artery wall that creates an intimal flap or intramural hematoma, obstructing blood flow

*The diagnosis of SCAD requires careful angiographic study and a high degree of suspicion.
*Accurate differentiation of ACS due to SCAD from ACS due to atherosclerosis is crucial, because the approaches to both acute and long-term management are different.
* Advanced imaging in the acute setting should be strongly considered in individuals who do not have standard coronary heart disease risk factors, in young or postpartum women or in patients who show an absence of plaque in non infarct-related coronary arteries

Conditions Associated with SCAD are:

Pregnancy or postpartum period
Fibromuscular dysplasia
Extreme physical and emotional stress
Hypertensive crisis and Coronary vasospasm
Connective-tissue abnormalities and monogenetic mutations

- Vascular Ehlers-Danlos syndrome (type IV)
- Marfan syndrome
- Loeys-Dietz syndrome
- Autosomal dominant polycystic kidney disease
- Pseudoxanthoma elasticum

Systemic inflammatory conditions, such as periarteritis nodosa, lupus erythematosus, and eosinophilia and Neurofibromatosis
Pharmacologic agents, such as cocaine

SCAD is a markedly under recognized and important cause of ACS, particularly in young women. The pathophysiology and responses to standard treatment differ from those of atherosclerotic ACS, so proper management demands accurate diagnosis.

Novel intracoronary imaging can be valuable both in confirming the diagnosis and in guiding treatment decisions, because percutaneous coronary procedures carry high rates of procedural complications in SCAD patients, and conservative management is more appropriate in some cases.

Although the underlying cause of SCAD is still largely unknown.

Take home message

- The patients undergoing PCI for acute SCAD have technical success rates that are markedly reduced compared with PCI success rates for atherosclerotic ACS (62% vs 92%)
- The substantial rate of spontaneous vascular Healing suggests a role for conservative management in stable SCAD patients who have preserved coronary flow.
- Although conservative management has generally been associated with favorable outcomes, this approach is associated with a small early hazard of dissection progression and the consequent need for intervention

Thank you