

CORONARY PSEUDO-ANEURYSMS AND SPONTANEOUS CORONARY ARTERIES DISSECTIONS HOW WOULD I TREAT *Surgeon's view*



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DÉCLARATION DE LIENS D'INTÉRÊT AVEC LA PRÉSENTATION

Intervenant : Mauro ROMANO, Massy

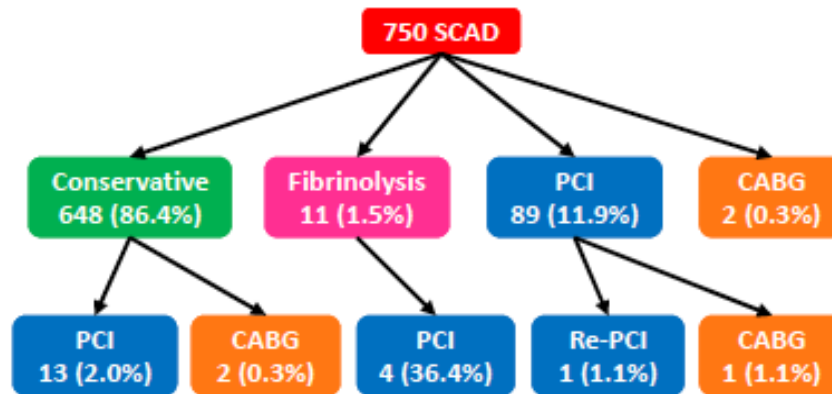
Je n'ai pas de lien d'intérêt à déclarer

Characteristics and treatment of true coronary aneurysms vs. coronary PSA

Type	Cause	Symptoms	Course	Treatment
Aneurysm (focal coronary artery dilation at least 50% larger than an adjacent coronary segment; contains all 3 layers of the vascular wall)	Atherosclerotic (most common), congenital, inflammatory, infectious, metastatic tumors, blunt chest trauma, spontaneous	Chest pain, ischemia, fatigue, dyspnea, palpitations, syncope, most may be asymptomatic	Stable in size or enlarges slowly, fistula formation, rupture, distal embolization	Spontaneous resolution, stent, CABG
PSA (lacks at least 1 layer of the vascular wall and contains an outward bulging mono-layer or double layer)	Arterial dissection or rupture (common cause), Post-PCI, atherosclerotic, infection, trauma, pregnancy, spontaneous	Chest pain, ischemia, MI, death	May expand rapidly and rupture, cardiac tamponade, thrombosis, distal embolization	Stent, CABG, possible coil embolization

CABG, coronary artery bypass graft surgery; PCI, percutaneous coronary intervention; MI: myocardial infarction.

Revascularization:



PCI Strategy [n(%)]	N=750
Treatment strategy	
Conservative	632 (84.3%)
Fibrinolysis	11 (1.5%)
Revascularization (PCI or CABG)	110 (14.7%)
PCI	106 (14.1%)
CABG	5 (0.7%)
SCAD PCI Procedures & Outcomes	
N=103	
Wiring only	15 (14.6%)
Balloon angioplasty	21 (20.4%)
- Cutting balloon	5 (4.9%)
Stent placement	67 (65.0%)
Number of stents implanted	
1	21/67 (31.4%)
2	23/67 (34.1%)
3	15/67 (22.4%)
4 or more	8/67 (11.9%)

Rationale for revascularization [n(%)]	N=110
Ongoing chest pain	43 (39.1%)
Ongoing ischemia on ECG	38 (34.5%)
Dissection causing severe stenosis	35 (31.8%)
Proximal LAD, RCA, or LCX dissection	25 (22.7%)
Large artery (>3mm) dissection	16 (14.5%)
Iatrogenic catheter-induced dissection	10 (9.1%)
Left main dissection	9 (8.2%)
Ventricular arrhythmia	8 (7.3%)
Recurrent chest pain in-hospital	6 (5.5%)
Hemodynamic instability (shock)	6 (5.5%)
Multiple coronary dissections	6 (5.5%)

PCI Outcomes [n(%)]	N=750
Final TMI Flow	
0	16 (15.7%)
1	6 (5.9%)
2	13 (12.7%)
3	67 (65.7%)
PCI effect on TIMI flow	
Improved	59 (57.6%)
Unchanged	40 (38.8%)
Worse	4 (3.9%)
Propagation of SCAD during PCI	33 (32.0%)
Overall PCI success	
Successful	30 (29.1%)
Partial success	42 (40.8%)
Unsuccessful	31 (30.1%)


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Pitfalls of PCI

- Low procedural success
- Difficulties in wiring the true lumen
- Extension of the dissection
- Abrupt vessel closure after stenting
- Poor long term results (restenosis)

Limitations of conservative treatment

- Exact mode of medical treatment not well defined
- DAPT? For how long?
- Statins for endothelial dysfunction
- Beta-blockers  shear stress
- ACE inhibitors + statins

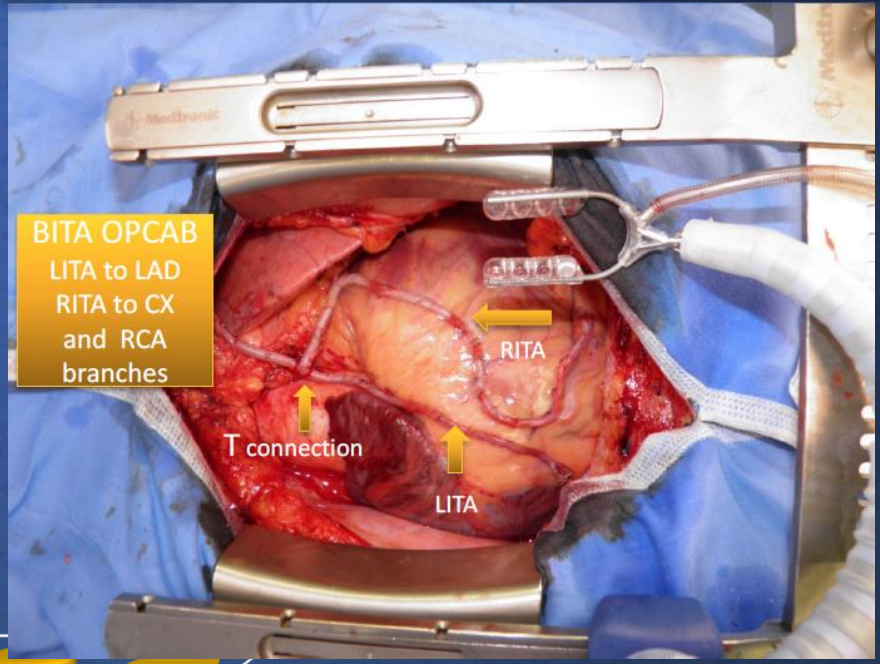
CABG/OPCAB : when?

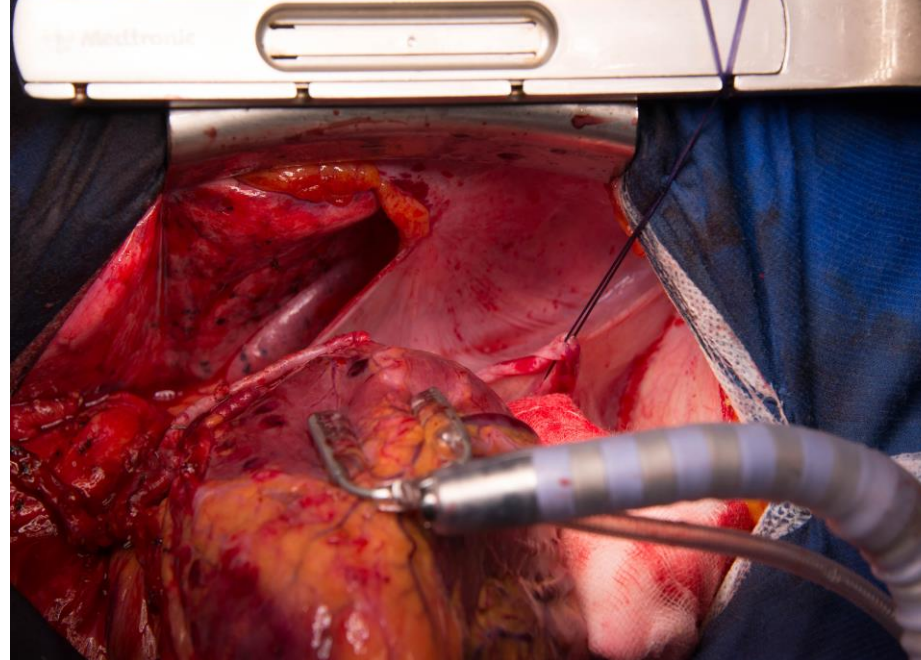
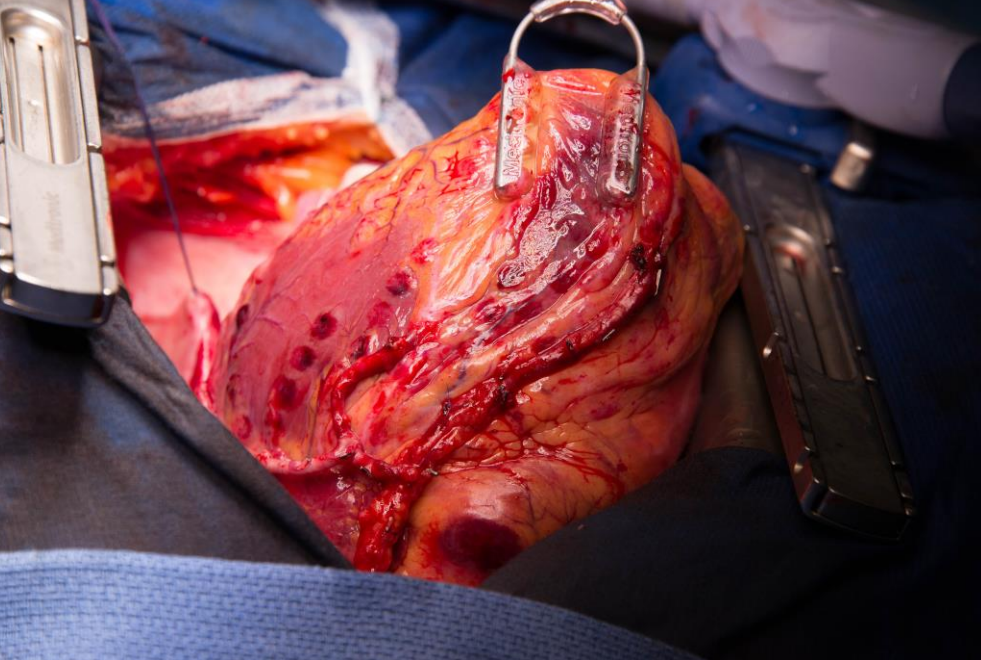
- Early or late failure of PCI
- Patients with long life expectancy
- Multiple SCAD

Number of grafts /patient : 3.4 (mean)



TOTAL ARTERIAL WITH BITA 69.2 %





Exclusion of PSA mandatory

- Concomitant ligation or
- Subsequent or concomitant coil injection



CABG/OPCAB

- Low risk
- Long lasting results
- Avoid repeat hospitalizations
- Avoid repeat angiographies
- Avoid the uncertainties and the side effects of the medical treatment

CABG/OPCAB

Valid alternative option for the treatment of PSA and SCAD
MIDCAB and Hybrid strategies could be considered

THANK YOU

