Enough theory: a clinical case

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I know what to do ...

- CS (FAME II pt.)
  - 62 yo male
  - Hy:
    - HT, HLP, obesity,
    - LAD PCI (2000),
    - NSTEMI (2011): Cx PCI + LAD & RCA disease
  - Feb. 2011.: randomized in FAME II study: PCI
Angiographic plan

1 long stent in LAD, 2/3 stents in RCA w/ bifurcation tx
Unnecessary FFR measurement?

- Implanting 1 DES in LAD would have left the pt ischemic
- Implanting (multiple) DES in RCA would have made no sense:
  - No benefit to the pt
  - Risk of ST and ISR considerably elevated
  - Incurred costs
- What other diagnostic algorhythm could be of the same help?
FFR in critical anatomy

• ZI (Mrs. Tough MI Pt)
  – 53-year-old lady
  – Hx: hypertension, type II diabetes mellitus, s/p nephrectomy
  – March 4, 2006: anterior STEMI (3 hrs)
  – Coronary angiography
  – Echo: LVH, good LVF, anterior akinesia w/o thinning
PCI of the LAD

RCA

Tecnic 3,0x15 mm
And now what?

- How to treat the patient?
  a) OMT
  b) LM PCI
  c) RCA PCI
  d) LM + RCA PCI
  e) CABG

- How to decide?
  a) Ergometry
  b) MPS
  c) DSE
  d) FFR
ZI: Left coronary artery

140 μg/kg/min iv adenosine
140 μg/kg/min iv adenosine
• No further treatment
• Pt continues to be symptom-free
Take home messages

- Diagnostic coronary angiography indicated w/o any non-invasive demonstration of ischemia (everyday practice) → **value of invasive demonstration of ischemia by FFR**
- MVD cases are sometime challenging for non invasive diagnostic work-up→ **FFR is ready-to-use when decisions are being taken as to revascularization**
- MVD cases are deceiving: severe looking, complex lesions may not be ischemia producing → **keep low threshold for applying FFR measurement in MVD**
- **Post-PCI FFR measurement is a good tool for quality ctrl**
- **Functionally complete revascularization confers most benefit to the patient**
Thank you