

MASTERTHE COMPLEX

Optimizing revascularization through innovation, training, and education.





CASE STUDY

WORKHORSE-LIKE FFR WIRE ASSESSES COMPLEX CASE WITH 90° ANGLE

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As interventional cardiologists are being presented with more complex patients, FFR is an increasingly important tool to use to guide PCI. This case highlights the need for a FFR wire that can be used in highly tortuous anatomy.



Right coronary artery

Patient History

- Female 76 years old with hypertension & diabetes mellitus
- Renal dysfunction (serum creatinine 2 mg/dl)
- Previous coronary angiography (5 years ago) for stable angina: intermediate stenosis on the second obtuse marginal with a negative FFR (0.89 not pictured)
- Recent admission to surgical department for liver resection (high risk surgery > 5%)
- Cardiovascular assessment pre surgery resulted in functional capacity < 4 mets and chest pain during intense effort
- Indication to perform coronary angiography



Left coronary artery (caudial view)

Case Challenges

- Significant angulation and tortuosity: may be difficult to deliver FFR wire
- "Oculo-stenotic" assessment of the first obtuse marginal (OM) will determine if PCI of the second OM and therefore DAPT are needed

Coronary Angiography Performed



- Left main showed non significant stenosis (click on video 2)
- The first obtuse marginal showed a 70% stenosis (click on video 2)
- Note: access was difficult at a 90 degree angle. This was complicated by an additional stenosis immediately after the ostium
- Second obtuse marginal: no change from the previous examination
- LAD showed a 65% stenosis in the distal segment (click on video 3)

COMET™ FFR Pressure Guidewire Characteristics

- Asahi co-developed for true workhorse capabilities
- Free rotation while steering and reliable re-connection
- · Optical pressure sensor



OM stenosis



Click here to learn more about the new Asahi co-developed COMET™ FFR quidewire from Boston Scientific:



FFR 0.83



Comet delivery in 90 degree OM

FFR Of LAD

- The COMET™ FFR wire was delivered down the LAD and gives an FFR value of 0.83 (see image 1)
- · No stents placed

FFR Of Second Obtuse Marginal

- COMET™ FFR wire delivers down a highly tortuous vessel with 90 degree angle (click on videos 4 & 5)
- FFR of 0.95 (see image 2)
- · No stents placed



FFR measurement taken



FFR 0.95

KEY LEARNINGS

This case highlights:

- The need to have available new, modern FFR guide wires that allow the operator to analyse complex, tortuous vessels with angulation
- In this case FFR helped the operator avoid unnecessary PCI and DAPT treatment thereby keeping the surgical option open if deemed necessary in the future
- Click here to learn more about the new Asahi co-developed COMET™ FFR guidewire from Boston Scientific:

http://www.bostonscientific.com/en-EU/products/imaging-systems/comet-pressure-guidewire.html

