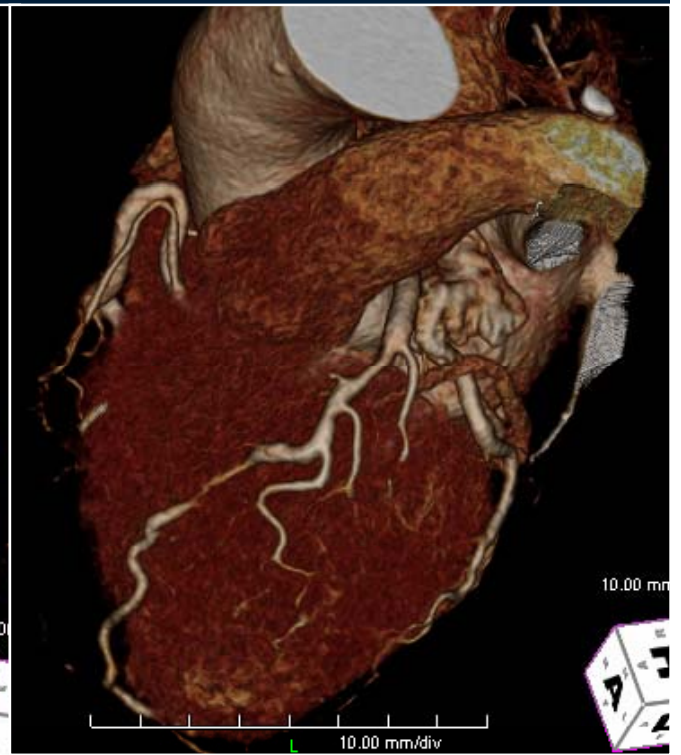
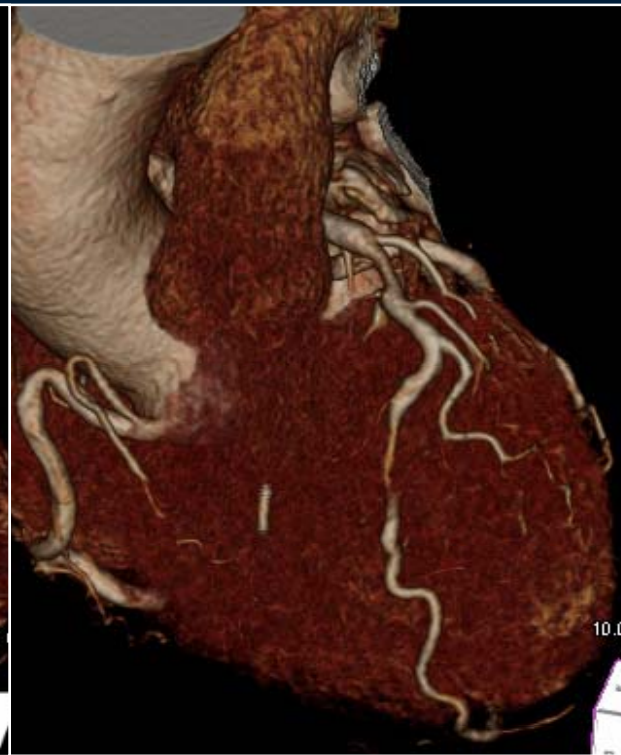
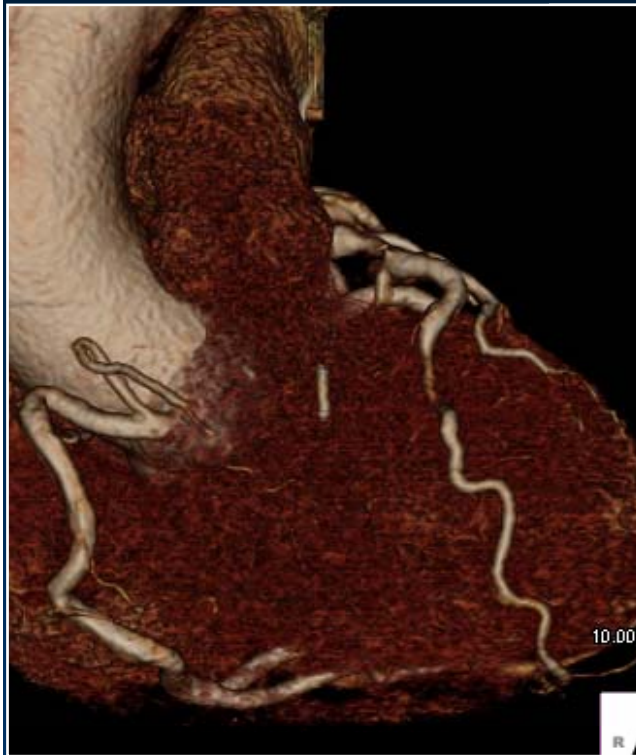
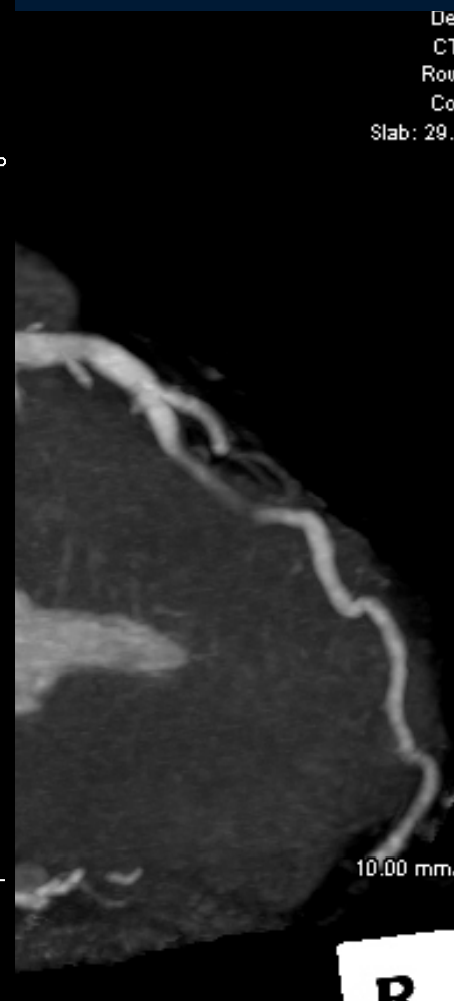
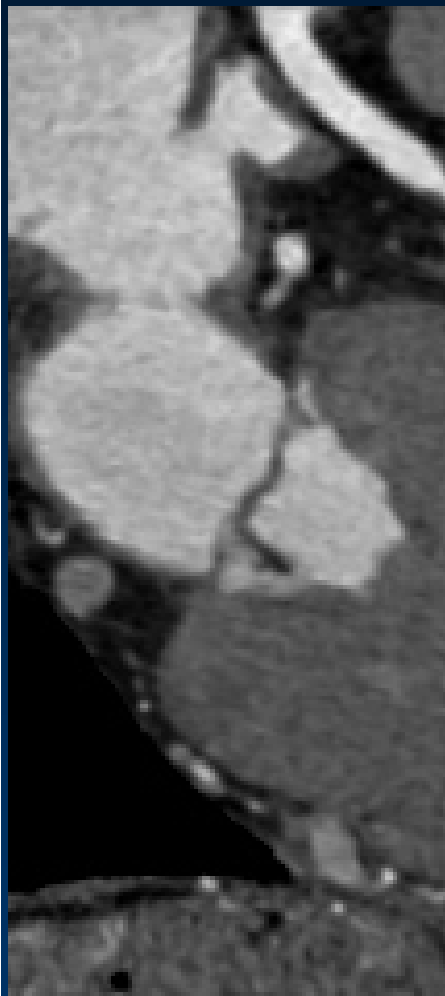


Case I

- M/65
- C.C: Chest Pain (since 1yr ago)
 - Hyperlipidemia(+)
- HR at MDCT scan: 76-85 bpm





Myocardial bridging

- **Definition:** Band of myocardium overlying a segment of coronary artery ('Tunneled artery')
-> Systolic compression of tunneled segment
- **Mechanism:**
 - Vasospasm, systolic kinking of artery -> Direct endothelial cell damage
 - Exercise induced high HR-> Shorten diastolic perfusion time -> Ischemia

Myocardial bridging

- **Complications:**

- Angina, myocardial ischemia and infarct
- Left ventricular dysfunction
- Myocardial stunning
- Paroxysmal atrioventricular blockade
- Sudden cardiac death

- **Treatment**

- Medical treatment for angina
- Angioplasty and stenting

Myocardial bridging: Diagnosis

- **Gold standard: Conventional angiography**
 - Milking effect
 - Step down-step up phenomenon
- **MDCT** (*Kantarci et al. AJR 2006*)
 - **22 Myocardial bridging cases (626 patient study)**
 - ♦ **Location:**
 - » Middle third of LAD: 15 pts (2.4%)
 - » Distal third of LAD: 5 pts (0.8%)
 - » Proximal third of LAD: 2 pts (0.3%)
 - ♦ **Length of tunneled artery:**
 - » 6-22 mm (Mean 17mm)
 - ♦ **Depth of tunneled artery:**
 - » 1.2-3.3 mm (Mean 2.5 mm)