

Lessons Learnt During Coronary Live Cases at EuroPCR

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Clinical Follow-up of EuroPCR 2004 live cases

Coronary live cases

11 live centers

61 patients

A solid red horizontal bar at the bottom of the slide.

| Center | Patients |
|---------------|-----------------|
|---------------|-----------------|

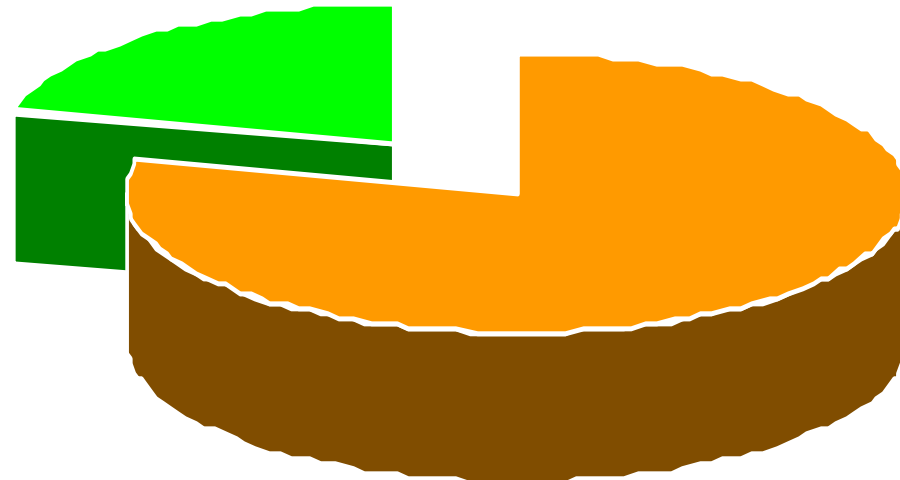
| | |
|-------------------------|-----------|
| • Toulouse, | 15 |
| • Aalst, | 11 |
| • IC Paris Sud, | 7 |
| • Rotterdam, | 6 |
| • Southampton, | 7 |
| • Beijing, | 3 |
| • Krakow, | 3 |
| • Montreal, | 3 |
| • Bad Krozingen, | 2 |
| • New-York, | 2 |
| • Madrid, | 2 |
| • TOTAL | 61 |

Baseline clinical characteristics

| | |
|----------------------------------|----------------|
| N | 61 |
| Age (yrs) | 64.4±10 |
| Male (%) | 88 |
| Hypertension (%) | 59 |
| Diabetes Mellitus (%) | 23 |
| Dyslipidemia (%) | 64 |
| Current smoker (%) | 47 |
| Family history of CAD (%) | 41 |
| Previous MI (%) | 25 |
| Previous PCI (%) | 26 |
| Previous CABG (%) | 25 |

Diabetic Patients n=14 (23%)

21%



79%

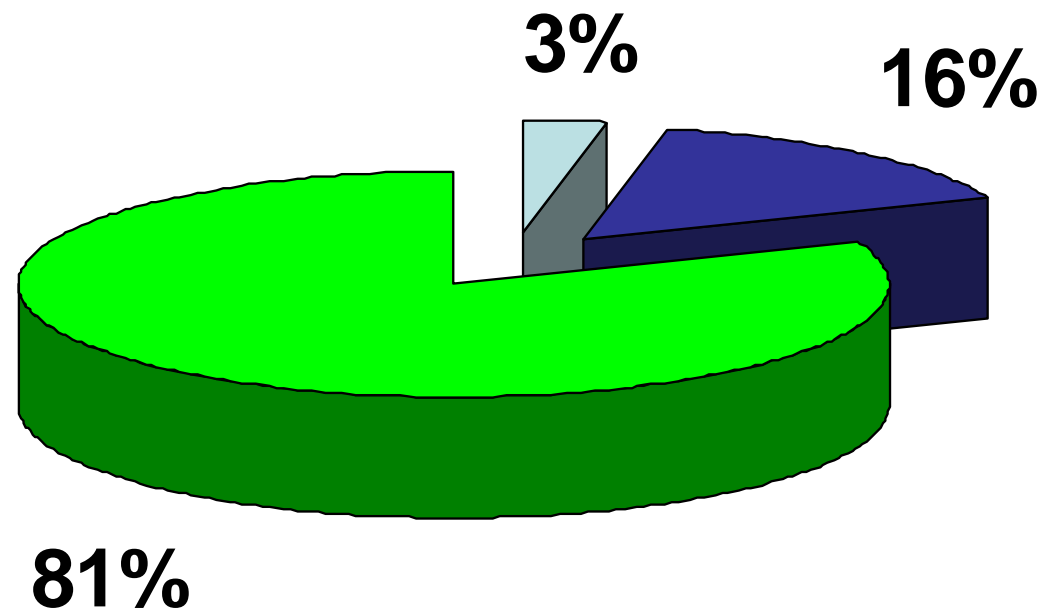
IDDM



NDDM



Clinical Presentation



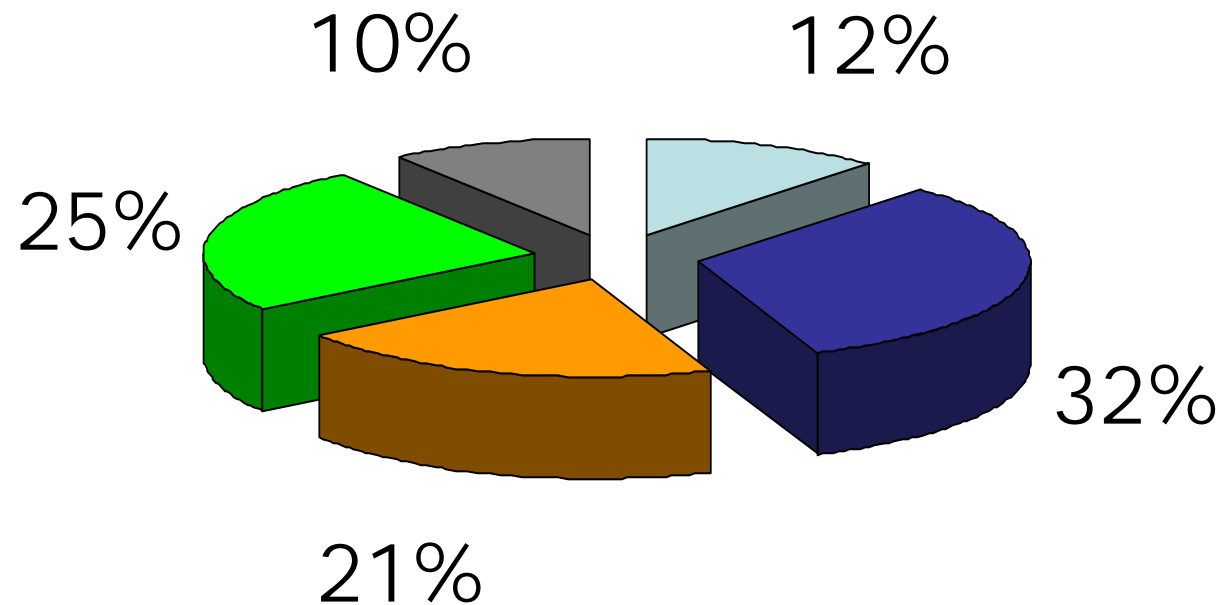
- silent ischemia
- stable angina
- unstable angina

Baseline angiographic characteristics

| | |
|---------------------------------|--------------|
| LVEF (%) | 58±18 |
| One-Vessel Disease (%) | 31 |
| Two-vessel disease (%) | 26 |
| Three-vessel disease (%) | 53 |
| Lesion Type* | |
| Type A (%) | 5 |
| Type B1 (%) | 13 |
| Type B2 (%) | 20 |
| Type C (%) | 62 |

* According to ACC/AHA Classification

Lesion Location



■ LM ■ LAD ■ LCx ■ RCA ■ CABG

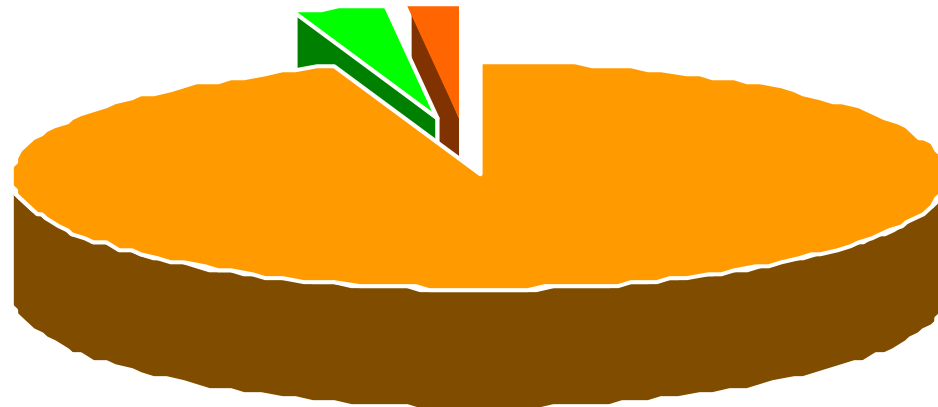
| | |
|-------------------------------|----|
| ‣ Long lesion (%) | 26 |
| ‣ Small vessel (%) | 12 |
| ‣ Bifurcation (%) | 30 |
| ‣ Ostial lesion (%) | 15 |
| ‣ Calcified lesion (%) | 8 |
| ‣ Thrombus containing (%) | 5 |
| ‣ Chronic Total occlusion (%) | 5 |
| ‣ In-stent restenosis (%) | 3 |

Procedural Data

61 Procedures

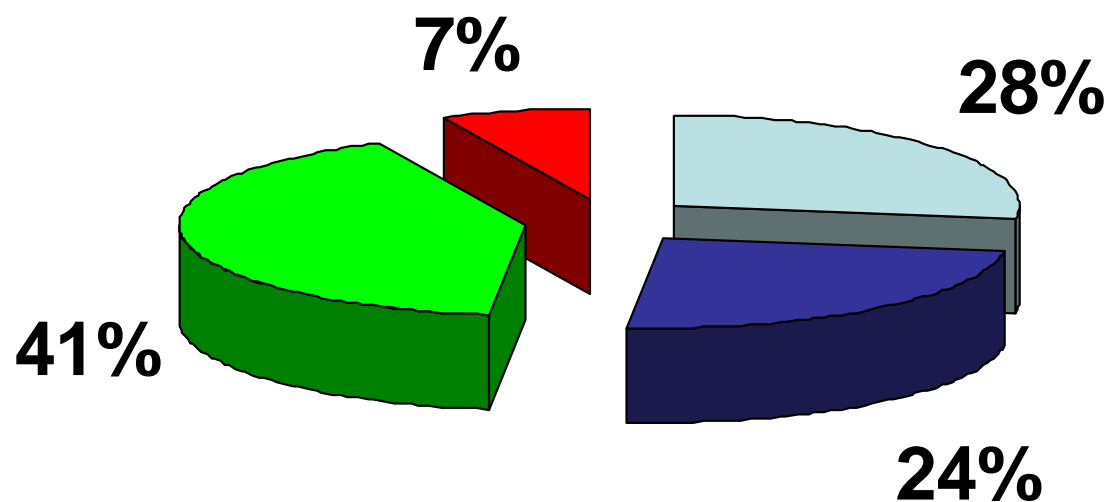
PCI failure 2

Medical 1



Stenting 58

Procedural Data



- bare stent
- Cypher
- Taxus
- otherDES

Procedural Data

- **58 patients with at least 1 stent**
- **42 patients with at least 1 DES**
- **4 patients with a new DES**

Procedural Data

| | <u>n</u> | <u>%</u> |
|-------------------------------|-----------|-----------|
| IVUS | 27 | 44 |
| FFR | 4 | 7 |
| Cutting balloon | 4 | 7 |
| Brachytherapy | 0 | 0 |
| Rotational atherectomy | 0 | 0 |
| Filter | 8 | 13 |

Procedural Data

| | |
|--|-------------------|
| ◦ No. of lesions treated/Pt | 1.4±0.67 |
| ◦ No. of stents implanted/Pt | 1.8±0.5 |
| ◦ Mean stent length/Pt (mm) | 37.45±21,8 |
| ◦ Mean stent length/lesion (mm) | 25.8±16 |
| ◦ GP IIb/IIIa inhibitor (%) | 12 |

In-hospital Outcome

| | |
|---------------------------------|-----------|
| Procedural success (%) | 97 |
| Failure (%) | 3 |
| In Hospital MACE (%) | 0 |
| Death (%) | 0 |
| MI (%) | 0 |
| Repeat revascularization | |
| PCI (%) | 0 |
| CABG (%) | 0 |
| Stroke (%) | 0 |

Follow-up

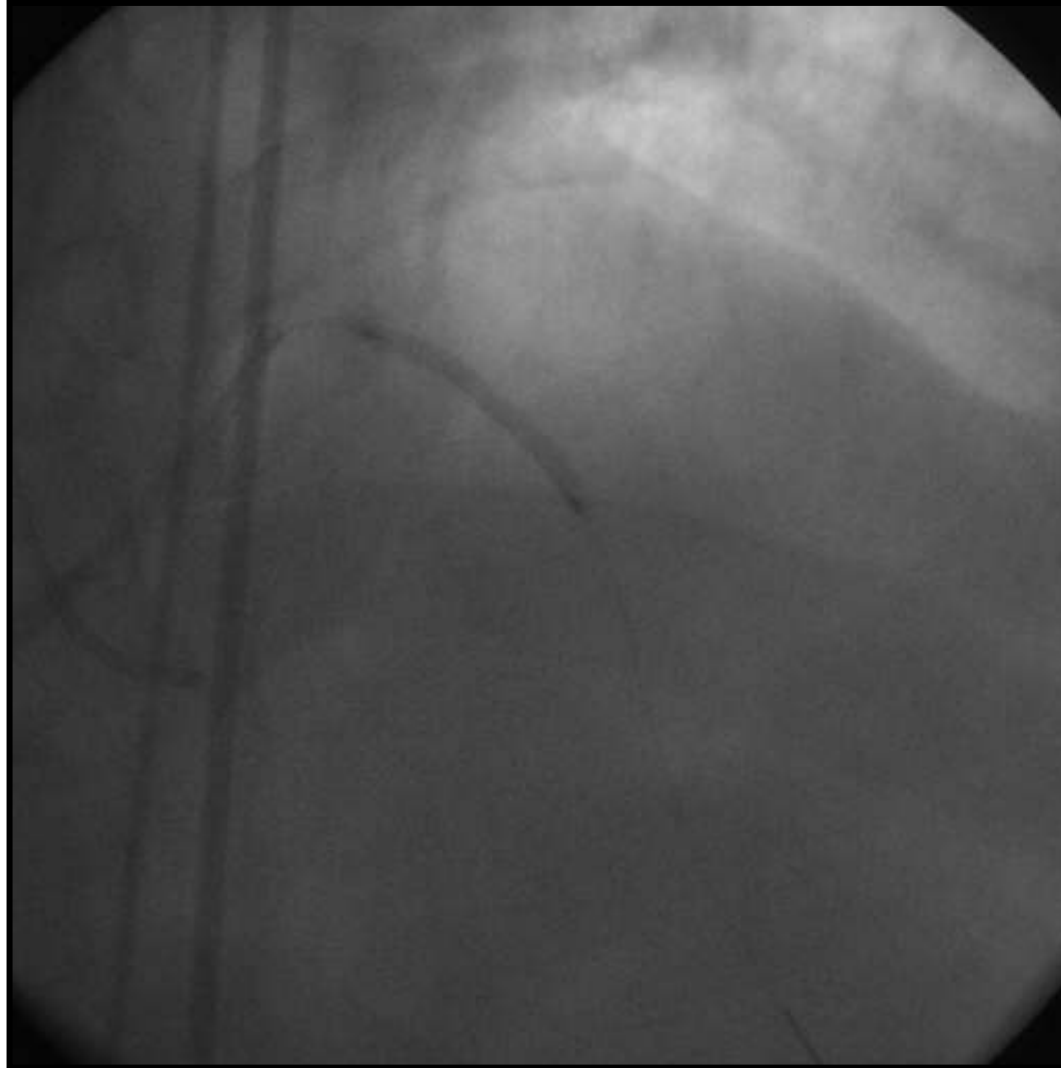
Clinical F-U obtained in 55/60 patients (92%)

Angio. F-U obtained in 32/60 patients (53%)

| Center | Patients | Clinical FU | Angio FU |
|------------------|----------|-------------|----------|
| • Toulouse, | 15 | 15 | 13 |
| • Aalst, | 11 | 11 | 2 |
| • IC Paris Sud, | 7 | 7 | 5 |
| • Rotterdam, | 6 | 6 | 5 |
| • Southampton, | 7 | 5 | 2 |
| • Beijing, | 3 | 3 | 2 |
| • Krakow, | 3 | 3 | 1 |
| • Montreal, | 3 | 3 | 2 |
| • Bad Krozingen, | 2 | 2 | 0 |
| • New-York, | 2 | 0 | 0 |
| • Madrid, | 2 | 0 | 0 |
| • TOTAL | 61 | 55 | 32 |

LAD proximal total occlusion

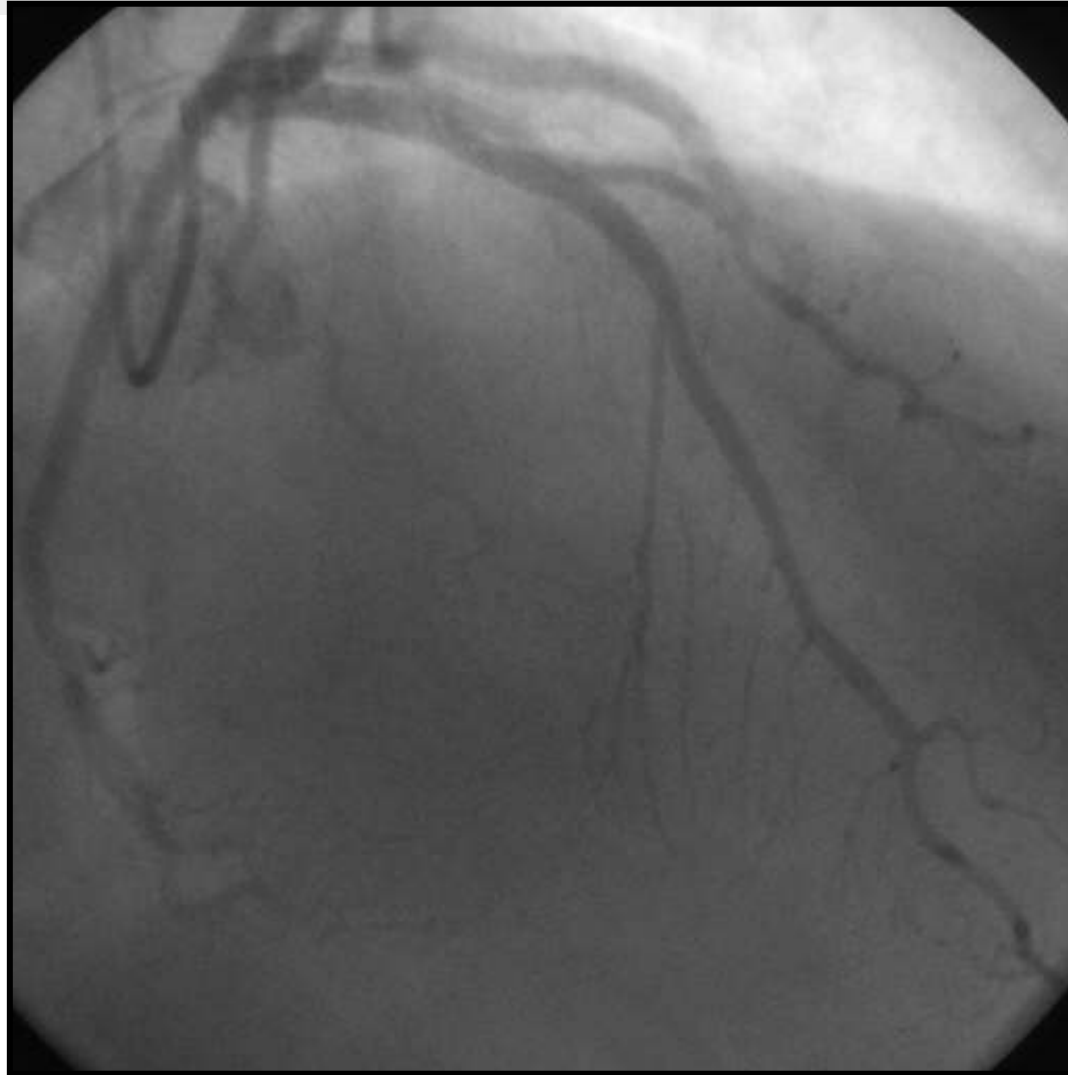




Final angiographic result



8-month repeat angiography



Unprotected LM + RCA lesions



Direct stenting of RCA stenosis



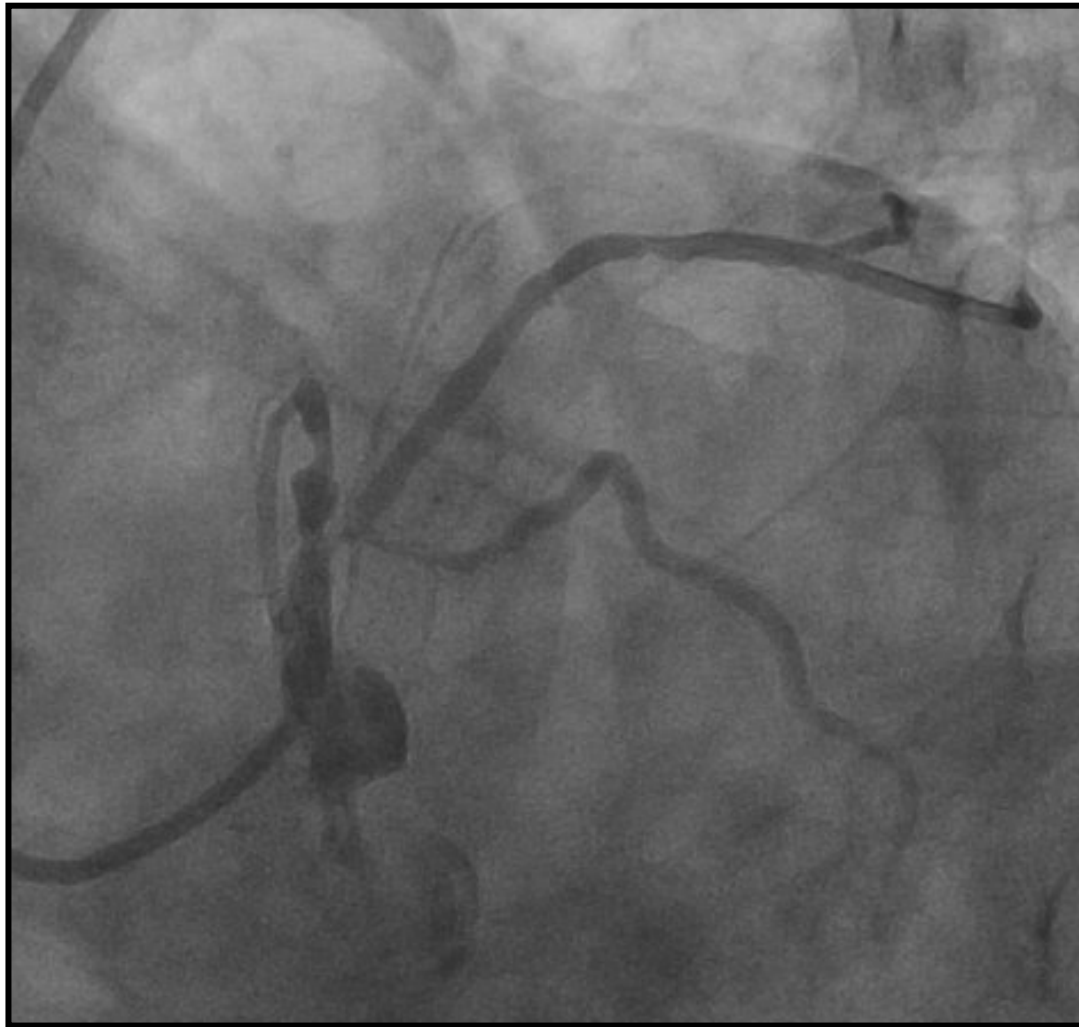
LM stenting



8-month repeat angiography



LM + ostial LCx stenosis (bifurcation lesion). LAD occluded. LVEF=40%.



LM-LCx-OM stenting



Final angiographic result



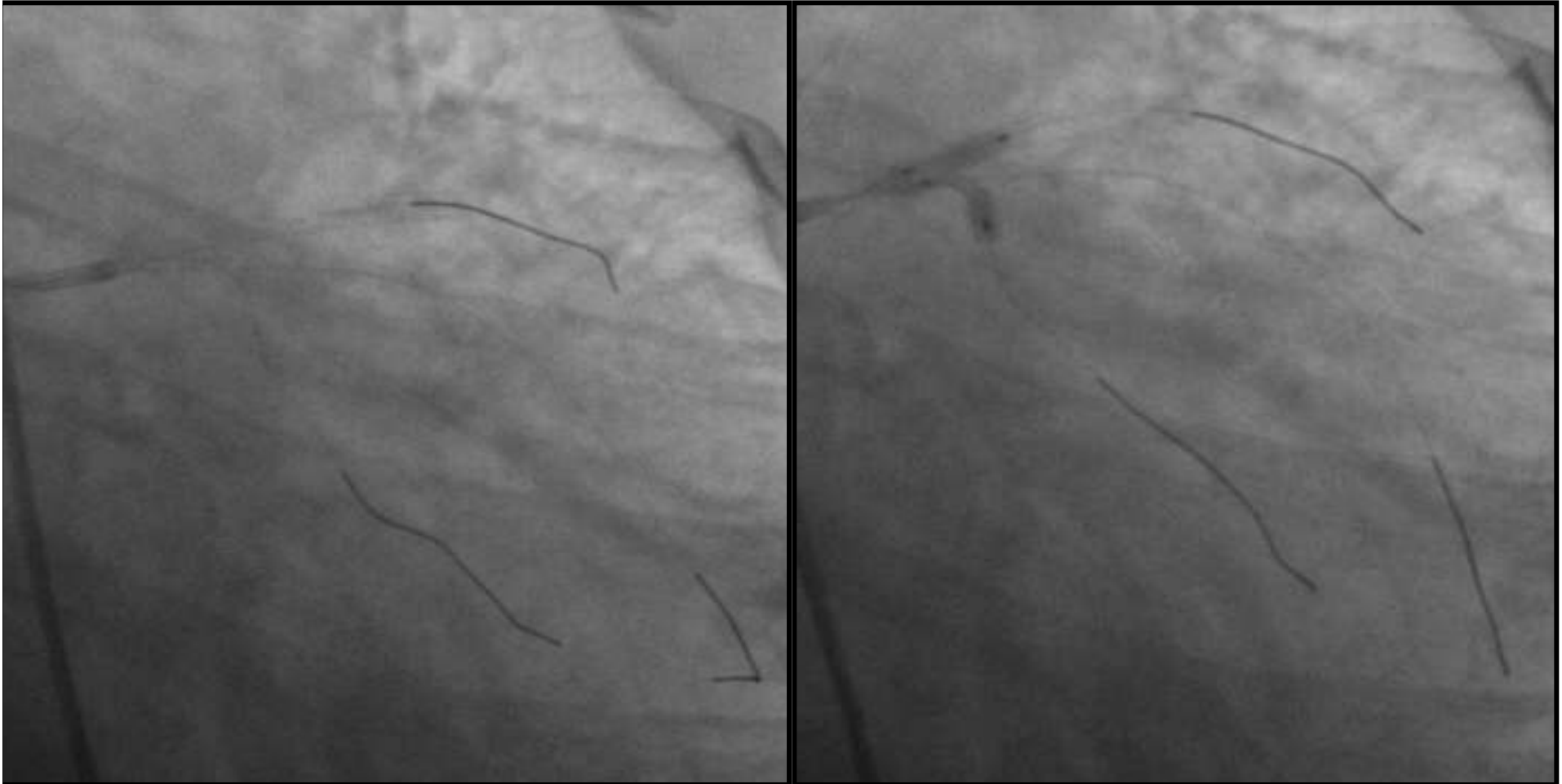
8-month angiographic F-U



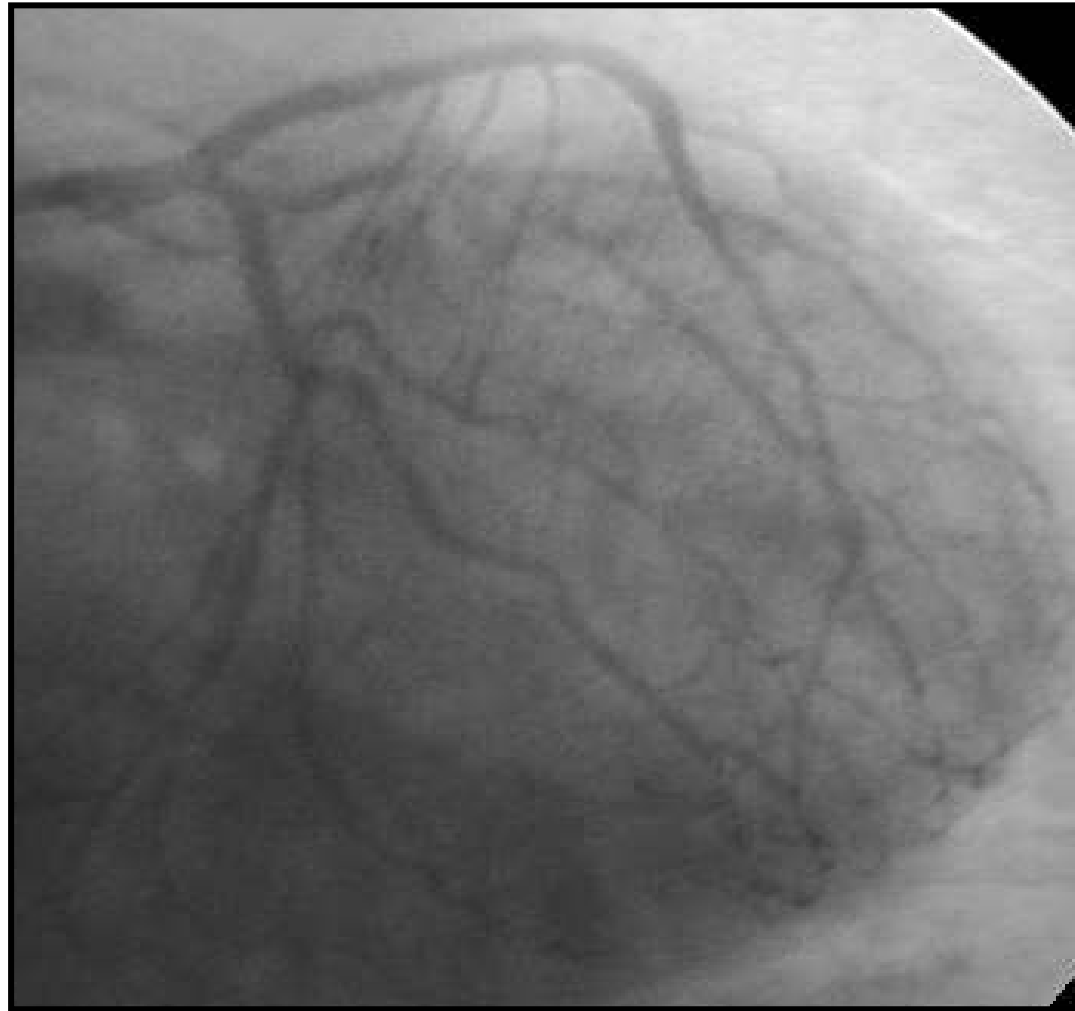
Distal unprotected LM stenosis + OM lesion



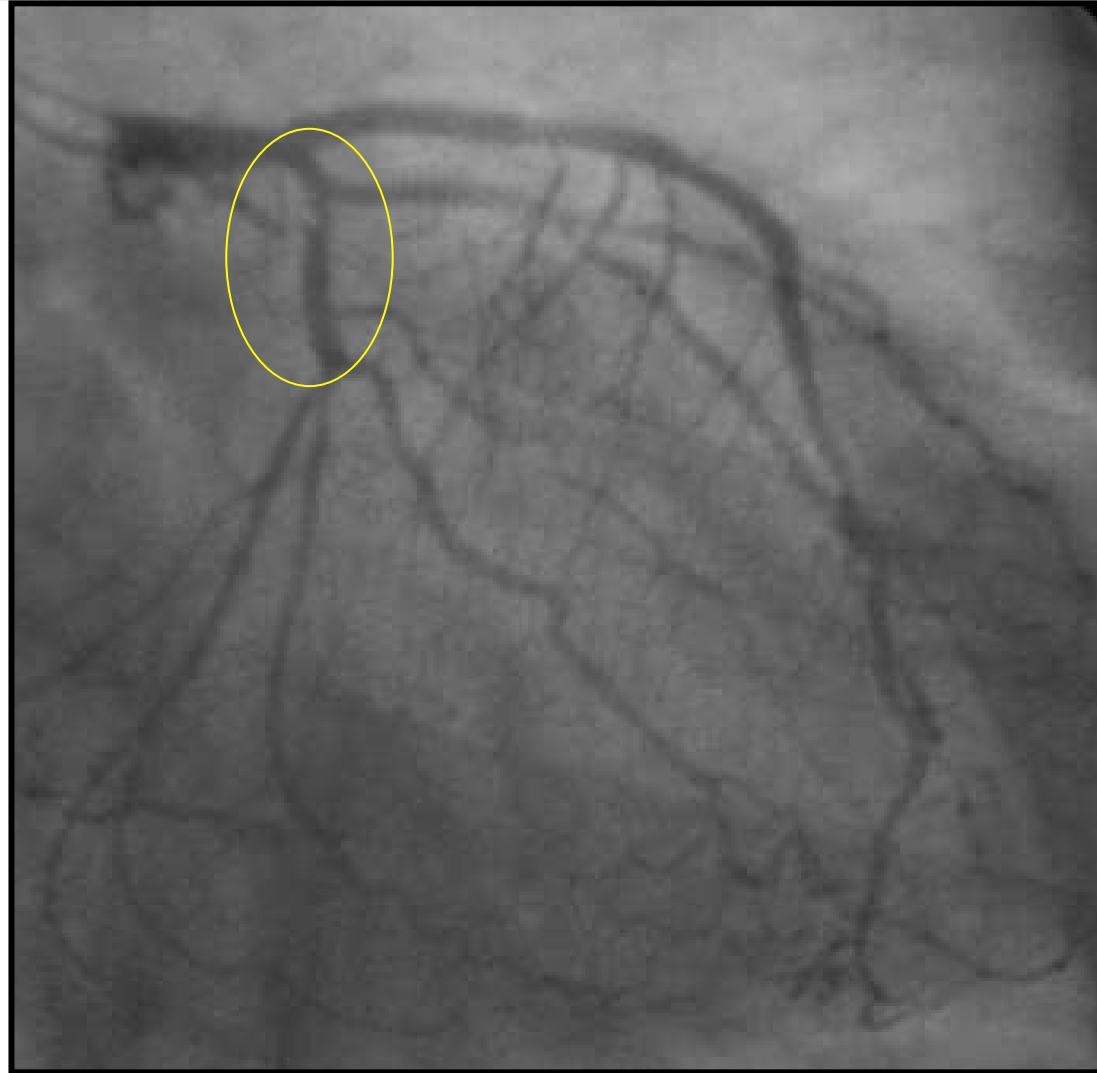
Triple wire and kissing technique



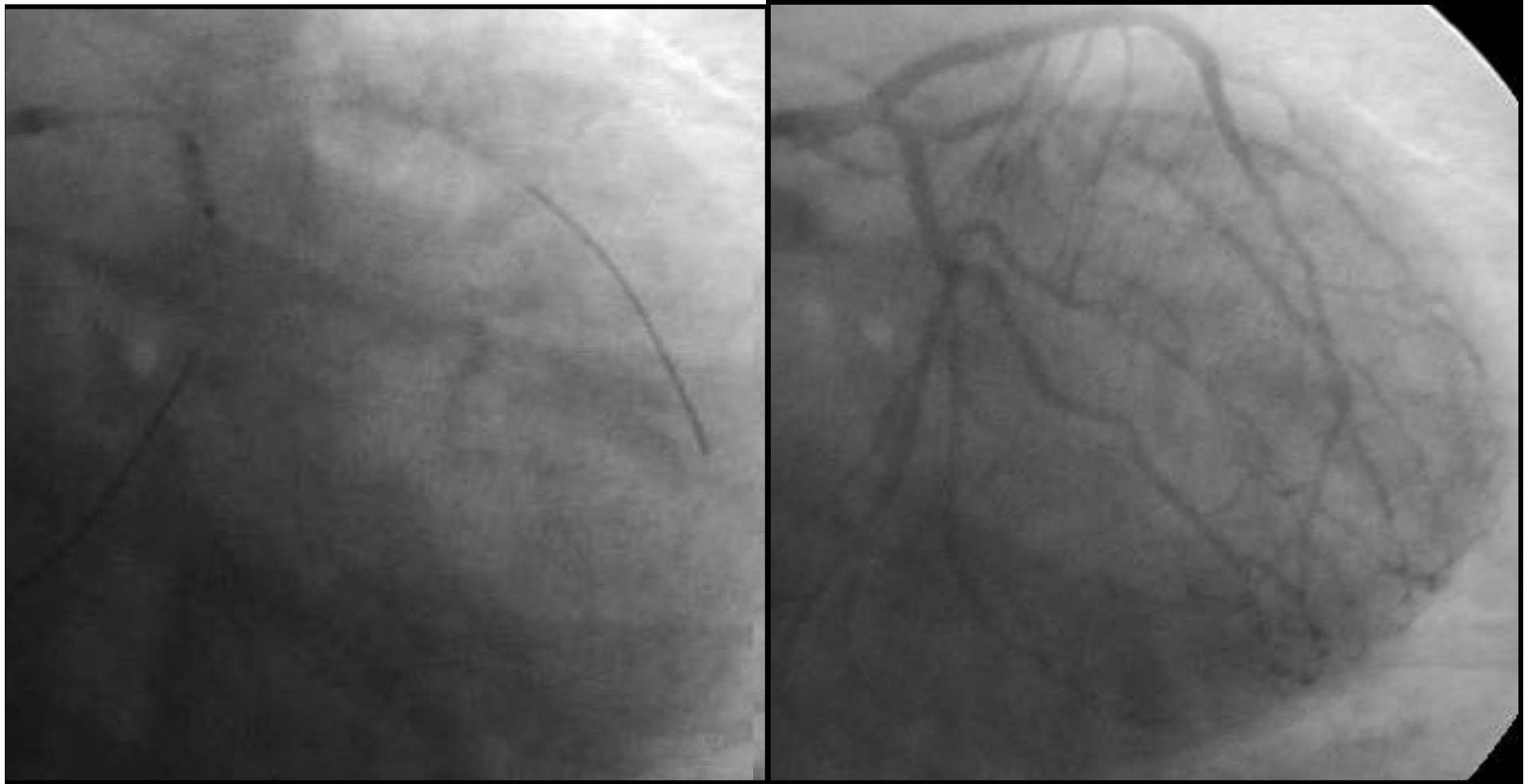
Final angiographic result



6-month repeat angiography



Repeat angioplasty



Mid-Term Clinical Outcome

Survival 96.7%
(2 cardiac deaths)

Mid-Term Clinical Outcome

Events during F-U (n=60)

| | |
|-------------------|----------------|
| MACE (%) | 18.3 |
| Death (%) | 3.3 |
| MI (%) | 1.5 |
| TLR | 13.3 |
| <i>PCI (%)</i> | 10 (6) |
| <i>CABG (%)</i> | 3.3 (2) |
| Stroke (%) | 0 |

Repeat Revascularization

| | Repeat revascularization | No repeat revascularization |
|---------------------|--------------------------|-----------------------------|
| PCI with DES (n=42) | 7 (16.5%) | 35 (85.5%) |
| PCI w/o DES (n=16) | 1 (6.2%) | 15 (93.8%) |
| Total (n=58) | 8 (13.8%) | 50 (86.2%) |

Comparison 2002 to 2004

| | 2002 | 2003 | 2004 |
|--|------|------|-----------|
| N° of centers | 8 | 11 | 11 |
| N° of patients | 60 | 59 | 61 |
| <u>Clinical characteristics</u> | | | |
| Diabetes(%) | 21.7 | 19 | 23 |
| <u>Angiographic characteristics</u> | | | |
| Long lesion (%) | 31.9 | 20 | 26 |
| Small vessel (%) | 4.1 | 15 | 12 |
| Bifurcations (%) | 20.5 | 21.5 | 30 |

Comparison 2002 to 2004

| Procedural data | 2002 | 2003 | 2004 |
|--------------------------------------|-------------|-------------|-------------|
| Stenting (%) | 88 | 86 | 97 |
| DES (%) | 50 | 69 | 72 |
| N° lesion/pt | 1.3 | 1.8 | 1.4 |
| N° stents/pt | 1.3 | 2.1 | 1.8 |
| Mean stent length/pt (mm) | 28.1 | 43.6 | 37 |
| Mean stent length/lesion (mm) | 23.2 | 22.3 | 26 |
| IVUS (%) | 45 | 42 | 44 |
| GP IIb/IIIa inhibitor (%) | 13.3 | 13.5 | 12 |

Comparison 2002 to 2004

| FOLLOW-UP | 2002 | 2003 | 2004 |
|-------------------------|-----------------------------|-----------------------------|-----------------------------|
| CLINICAL F-U (%) | 92 (55/60) | 92 (54/59) | 92 (55/60) |
| ANGIO F-U (%) | 37 (22/60) | 42 (25/59) | 53 (32/60) |

Comparison 2002 to 2004

| In-hospital outcome | 2002 | 2003 | 2004 |
|---------------------------------|------------|------------|----------|
| MACE(%) | 3.3 | 1.7 | 0 |
| Death(%) | 0 | 0 | 0 |
| MI(%) | 3.3 | 1.7 | 0 |
| Repeat revascularization | | | |
| PCI(%) | 0 | 0 | 0 |
| CABG(%) | 0 | 0 | 0 |
| Stroke | 0 | 0 | 0 |

Comparison 2002 to 2004

| FOLLOW-UP | 2002 | 2003 | 2004 |
|---------------------------------|-------------|-------------|-------------|
| SURVIVAL | 100 | 98.3 | 96.7 |
| MACE(%) | 34 | 13.6 | 18.3 |
| Death(%) | 0 | 0 | 3.3 |
| MI(%) | 5 | 1.7 | 1.5 |
| Repeat revascularization | 27.3 | 11.8 | 13.3 |
| PCI(%) | 21.8 | 11.8 | 10 |
| CABG(%) | 5.5 | 0 | 3.3 |
| Stroke | 0 | 0 | 0 |

Conclusions

- 60 patients treated in 11 centers
- 23% were diabetics
- Complex lesions with 82% B2-C and 30% bifurcations lesions
- DES were used in 72% of the patients
- Clinical F-U is obtained in 92%
- Angiographic F-U (53%) must be improved
- In-hospital outcome is good (2 failures, no MACE)
- 9-month clinical outcome showed, 18% MACE rate with 3% mortality and 13% TLR rates.