

# Un patient Bi ou Tritronculaire ?

Biarritz APPAC  
7 Juin 2011  
Bernard LIVAREK

# Histoire de Mr P., 59 ans

- Aout 2011 : IDM antérieur  
IVA1: Stent ZETA 2.75 x 13 mm, IVA 2: PIXEL 2.5 x 13 mm
- Janvier 2004: Resténose  
Trois CYPHER 2.5 x 18 mm et 2.5 x 13 mm en distalité,  
2.75 x 18 mm sur l'IVA II
- 2009: EE positive CYPHER 2.75 x 18 mm sur marginale

# Histoire de Mr P.

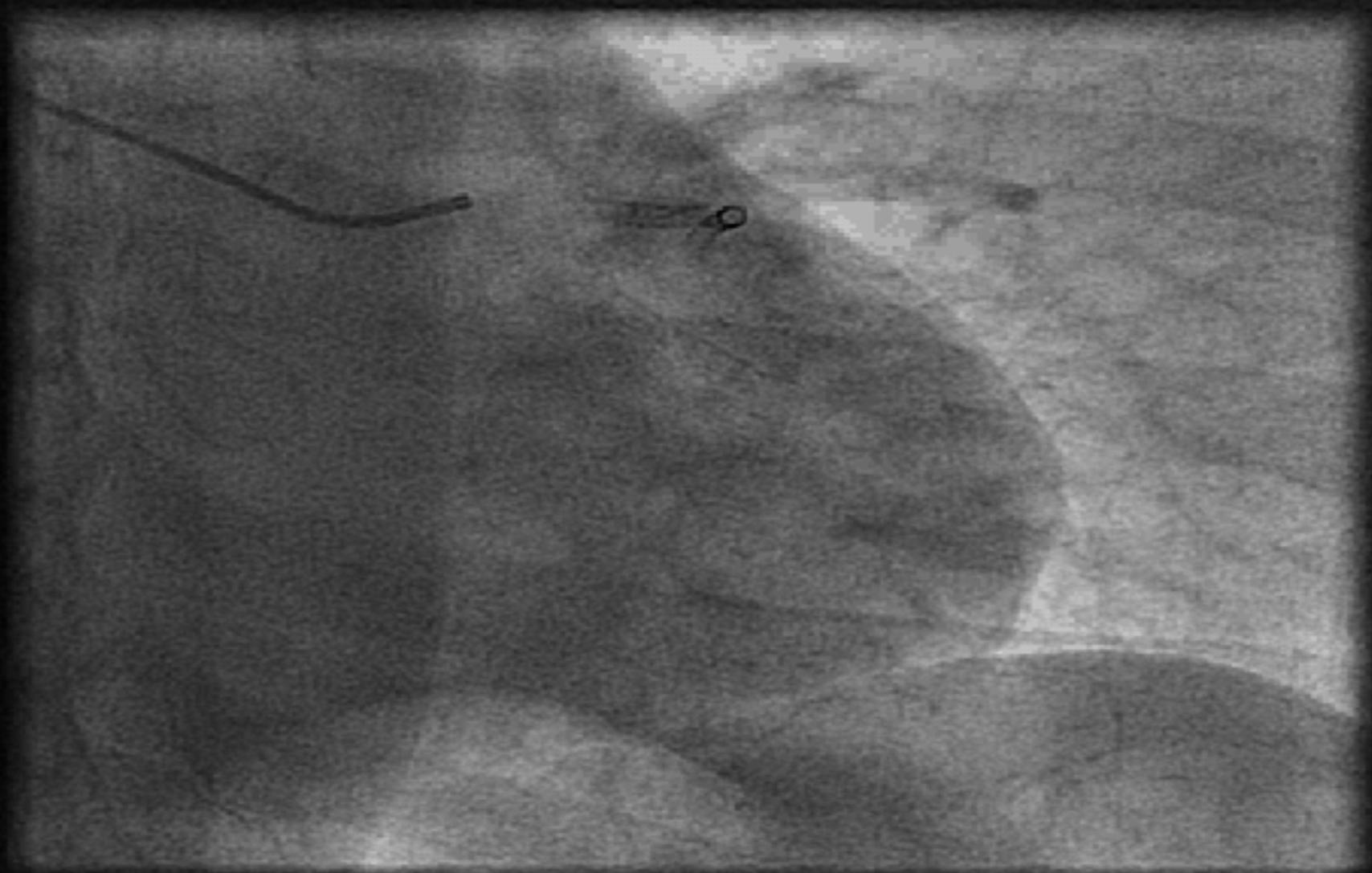
- FDR cardiovasculaires :
  - Dyslipidémie
- TTT habituel :
  - Kardégic 75 mg / Jour
  - Plavix 75 mg / Jour
  - Atenolol 50 mg/ Jour
  - Zestril 20 mg / Jour
  - Crestor 5 mg/ Jour

# HDM

- Mai 2011:  
Echo de stress: TV non soutenue, arrêt à 69% FMT  
FEVG 66%
- Coronarographie réalisée le 3 Juin 2011

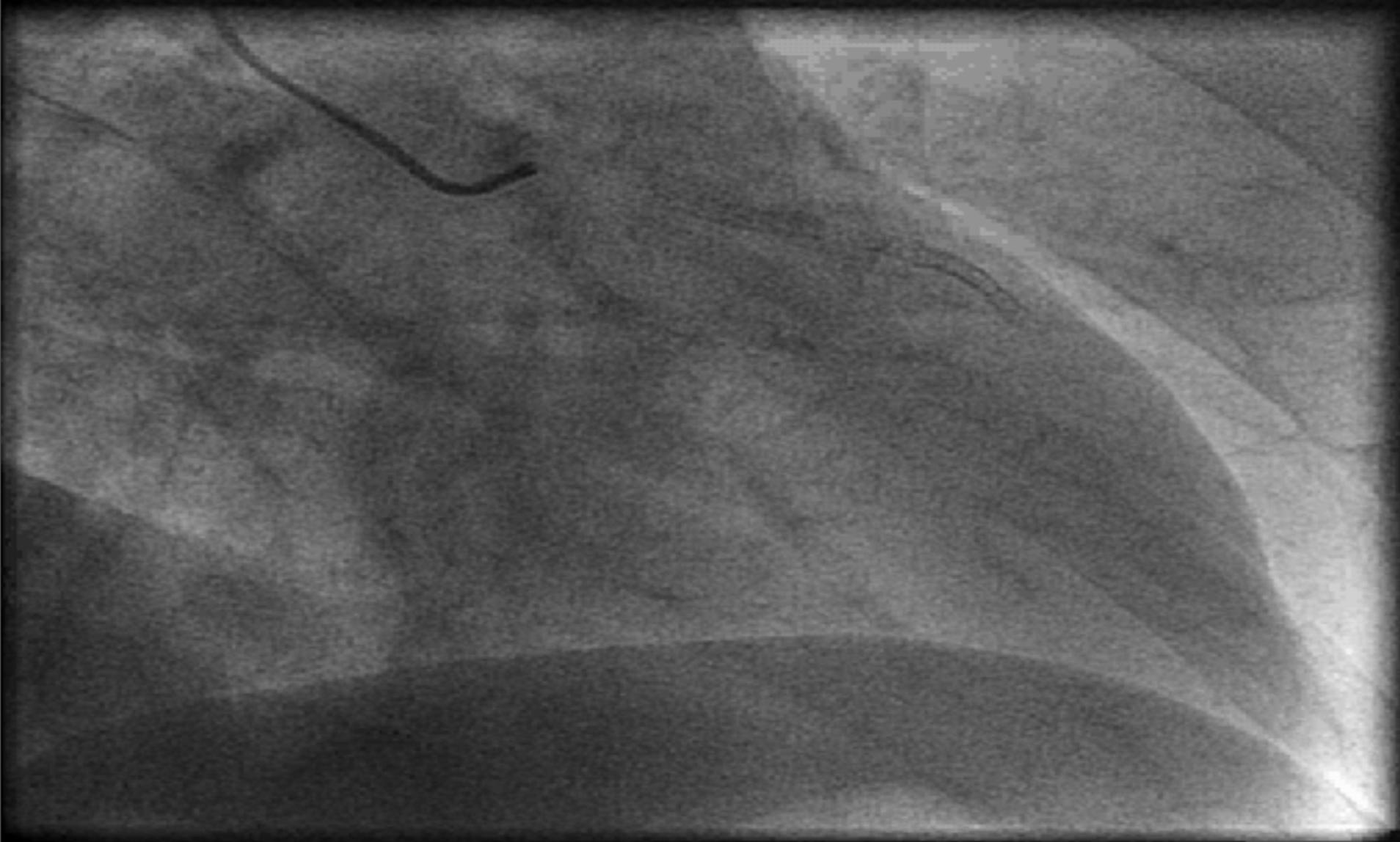
# Coronaire Gauche

Filtre : Filtre 4



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Filtre : Filtre 4



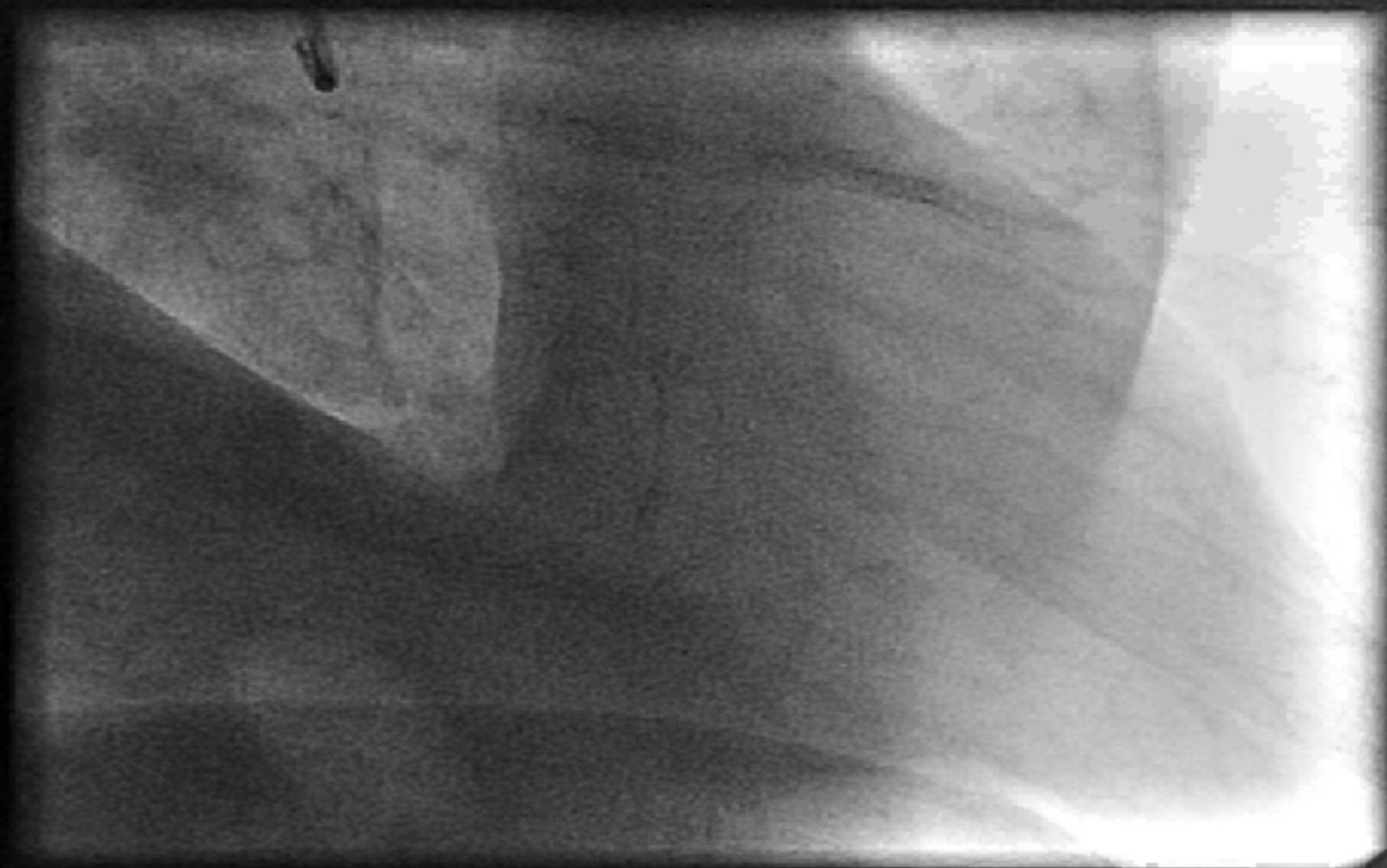
# Coronaire Gauche

Filtre : Filtrer 4



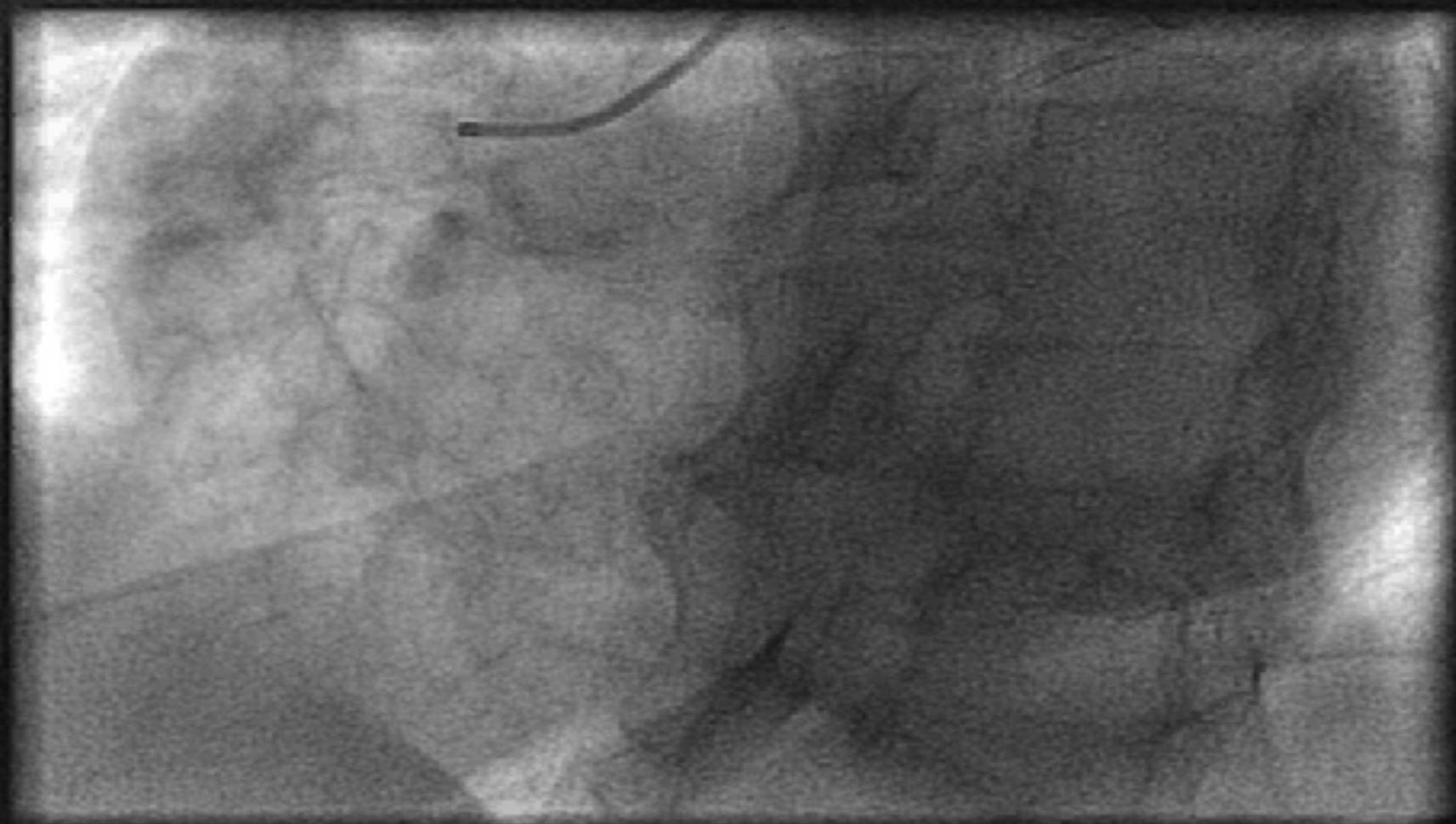
# Coronaire Gauche

Filtre : Filtrer 4



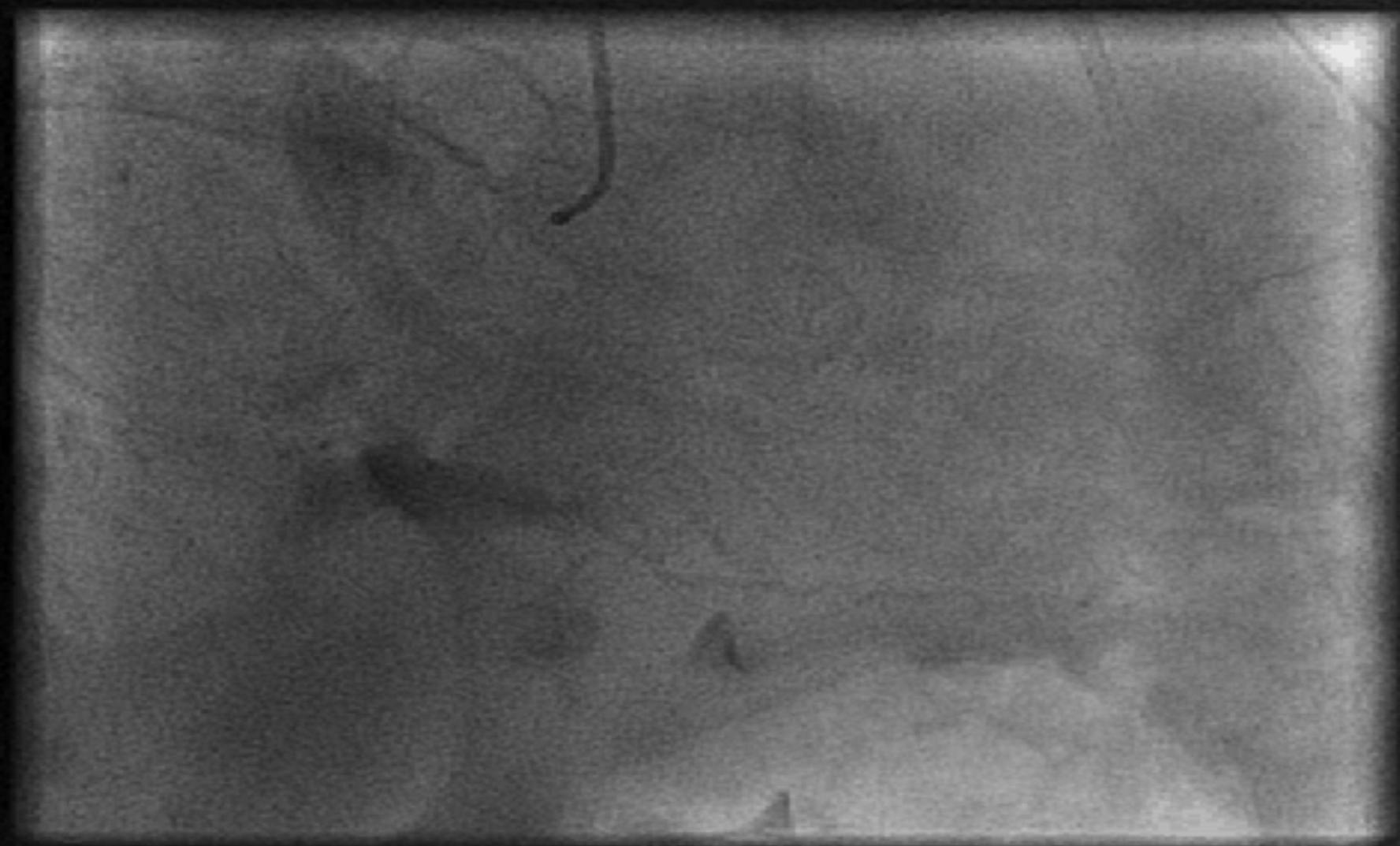
# Coronaire droite

Filtre : Filtrer 4



# Coronaire droite

Filtre : Filtrer 4



# Discussion de revascularisation

- Non diabétique, FE VG 66%, 59 ans
- Score syntax non calculable (Stents)
- Euroscore logistique: Mortalité prédite 2.3 %

# Discussion de revascularisation

- Revascularisation optimale ???

Lésion CD très distale non revascularisable

Lésion marginale idéale pour l'angioplastie

- Questions:

Quid de la CX ostiale, et surtout de l'IVA ???

Le patient est-il Bi ou Tritronculaire ??

Doit-on prescrire un test d'ischémie différent ??

**Table 8** Indications for revascularization in stable angina or silent ischaemia

	Subset of CAD by anatomy	Class <sup>a</sup>	Level <sup>b</sup>	Ref. <sup>c</sup>
<b>For prognosis</b>	Left main >50% <sup>d</sup>	I	A	30, 31, 54
	Any proximal LAD >50% <sup>d</sup>	I	A	30–37
	2VD or 3VD with impaired LV function <sup>d</sup>	I	B	30–37
	Proven large area of ischaemia (>10% LV)	I	B	13, 14, 38
	Single remaining patent vessel >50% stenosis <sup>d</sup>	I	C	—
	IVD without proximal LAD and without >10% ischaemia	III	A	39, 40, 53
<b>For symptoms</b>	Any stenosis >50% with limiting angina or angina equivalent, unresponsive to OMT	I	A	30, 31, 39–43
	Dyspnoea/CHF and >10% LV ischaemia/viability supplied by >50% stenotic artery	IIa	B	14, 38
	No limiting symptoms with OMT	III	C	—

<sup>a</sup>Class of recommendation.

<sup>b</sup>Level of evidence.

<sup>c</sup>References.

<sup>d</sup>With documented ischaemia or FFR <0.80 for angiographic diameter stenoses 50–90%.

CAD = coronary artery disease; CHF = chronic heart failure; FFR = fractional flow reserve; LAD = left anterior descending; LV = left ventricle; OMT = optimal medical therapy; VD = vessel disease.



**Table 4** Multidisciplinary decision pathways, patient informed consent, and timing of intervention

		ACS			Stable MVD	Stable with indication for <i>ad hoc</i> PCI <sup>a</sup>
	Shock	STEMI	NSTE - ACS <sup>b</sup>	Other ACS <sup>c</sup>		
Multidisciplinary decision making	Not mandatory.	Not mandatory.	Not required for culprit lesion but required for non-culprit vessel(s).	Required.	Required.	According to predefined protocols.
Informed consent	Oral witnessed informed consent or family consent if possible without delay.	Oral witnessed informed consent may be sufficient unless written consent is legally required.	Written informed consent <sup>d</sup> (if time permits).	Written informed consent <sup>d</sup>	Written informed consent <sup>d</sup>	Written informed consent <sup>d</sup>
Time to revascularization	Emergency: no delay.	Emergency: no delay.	Urgency: within 24 h if possible and no later than 72 h.	Urgency: time constraints apply.	Elective: no time constraints.	Elective: no time constraints.
Procedure	Proceed with intervention based on best evidence/availability.	Proceed with intervention based on best evidence/availability.	Proceed with intervention based on best evidence/availability. Non-culprit lesions treated according to institutional protocol.	Proceed with intervention based on best evidence/availability. Non-culprit lesions treated according to institutional protocol.	Plan most appropriate intervention allowing enough time from diagnostic catheterization to intervention.	Proceed with intervention according to institutional protocol defined by local Heart Team.

<sup>a</sup>Potential indications for *ad hoc* PCI are listed in Table 5.

<sup>b</sup>See also Table 12.

<sup>c</sup>Other ACS refers to unstable angina, with the exception of NSTEMI-ACS.

<sup>d</sup>This may not apply to countries that legally do not ask for written informed consent. ESC and EACTS strongly advocate documentation of patient consent for all revascularization procedures.

ACS = acute coronary syndrome; MVD = multivessel disease; NSTEMI-ACS = non-ST-segment elevation acute coronary syndrome; PCI = percutaneous coronary intervention; STEMI = ST-segment elevation myocardial infarction.

**Table 9** Indications for coronary artery bypass grafting vs. percutaneous coronary intervention in stable patients with lesions suitable for both procedures and low predicted surgical mortality

Subset of CAD by anatomy	Favours CABG	Favours PCI	Ref.
IVD or 2VD - non-proximal LAD	IIb C	I C	—
IVD or 2VD - proximal LAD	IA	IIa B	30, 31, 50, 51
3VD simple lesions, full functional revascularization achievable with PCI, SYNTAX score $\leq 22$	IA	IIa B	4, 30–37, 53
3VD complex lesions, incomplete revascularization achievable with PCI, SYNTAX score $> 22$	IA	III A	4, 30–37, 53
Left main (isolated or IVD, ostium/shaft)	IA	IIa B	4, 54
Left main (isolated or IVD, distal bifurcation)	IA	IIb B	4, 54
Left main + 2VD or 3VD, SYNTAX score $\leq 32$	IA	IIb B	4, 54
Left main + 2VD or 3VD, SYNTAX score $\geq 33$	IA	III B	4, 54

Ref. = references.

CABG = coronary artery bypass grafting; CAD = coronary artery disease; LAD = left anterior descending; PCI = percutaneous coronary intervention; VD = vessel disease.

????



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?????





La réponse peut  
être  
apportée par  
l'IVUS ou la FFR

# Coronarographie diagnostique

Lésions significatives

Lésions non significatives ou intermédiaires

Preuve d'ischémie

Pas de preuve d'ischémie

Scanner +  
ou preuve d'ischémie

Pas de preuve d'ischémie

Monotronculaire

Pluritonculaire

Examen fonctionnel  
Pour lever discordance

Plaque longue  
ou lésions étagées

Plaque  
courte isolée  
ou Stent (s)

Pas de FFR

FFR utile  
Pour ARI

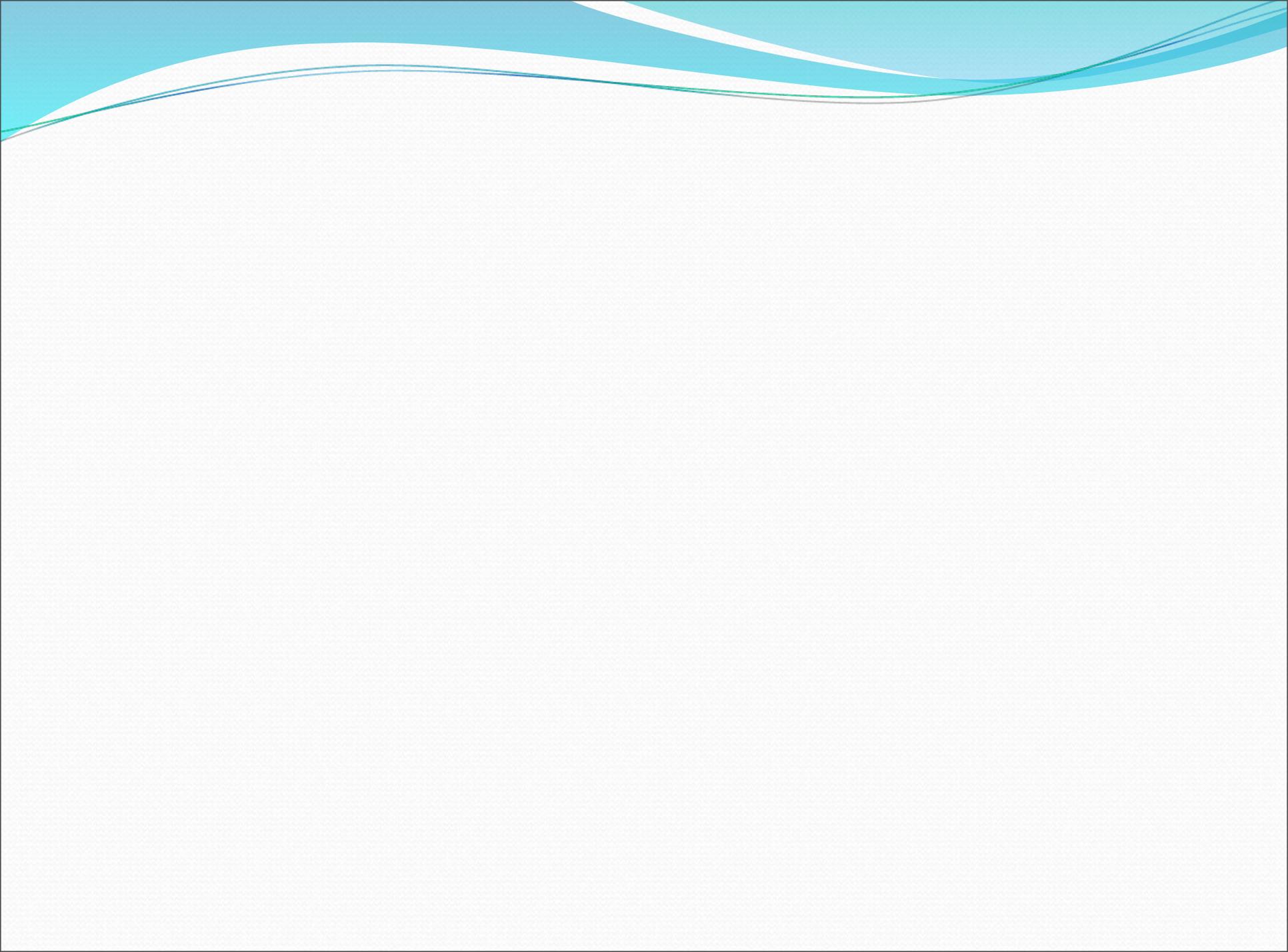
FFR

IVUS

Pas de FFR  
Pas d'IVUS  
Pas d'angioplastie

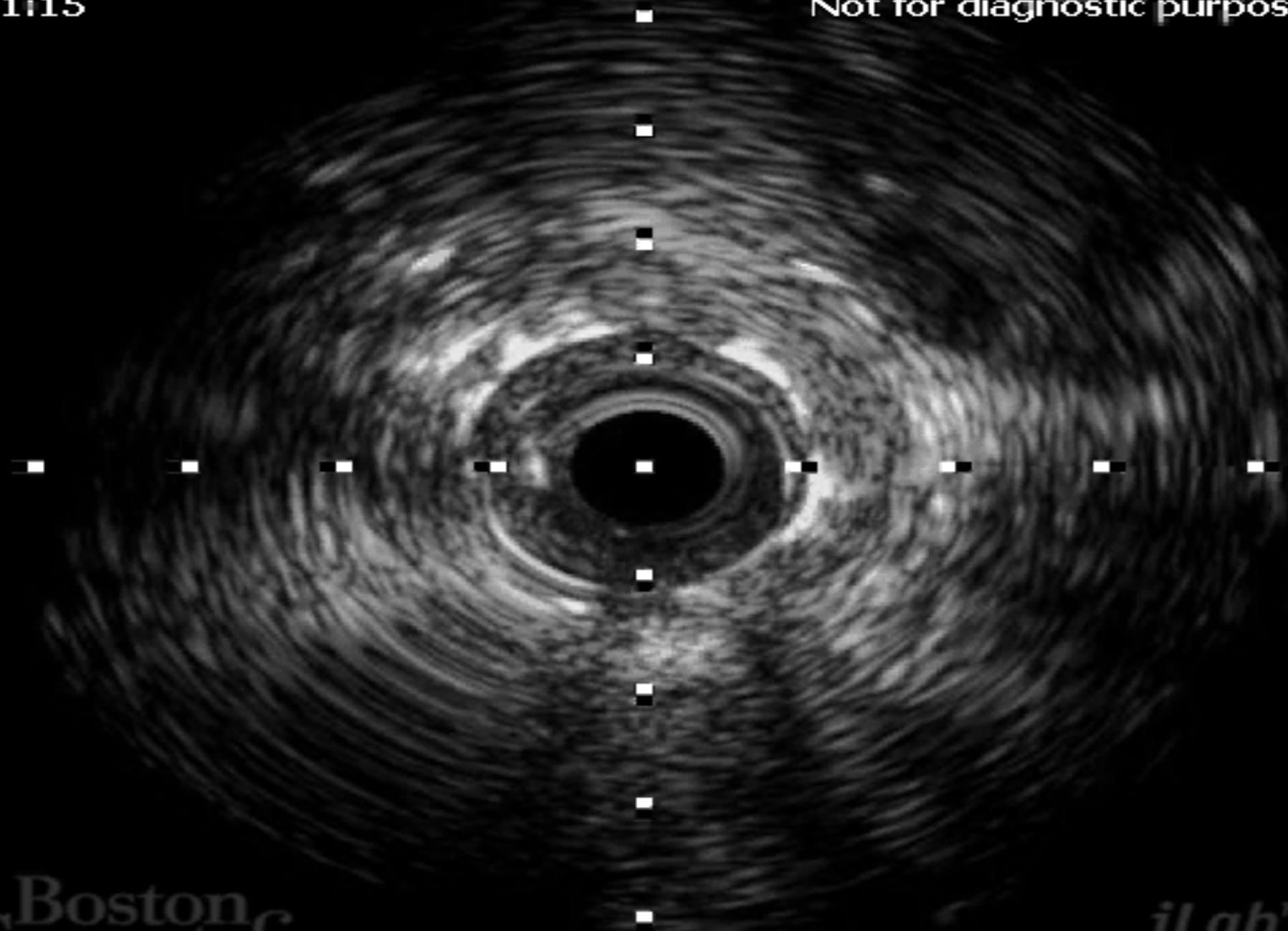
ANGIOPLASTIE CORONAIRE

IVUS morphologique si nécessaire  
(TC, Ostium, Thrombus, Dissection,  
Malapposition de stent, Image ambiguë)



03/06/2011  
11:15

Lossy Image  
Not for diagnostic purposes



Boston  
Scientific

iLab™  
Ultrasound Imaging System

En IVUS la surface minimale endoluminale est mesurée à 2.79 mm<sup>2</sup> en intra-stent sur l'IVA moyenne déjà stentée en sandwich (deux stents).

# Take Home Messages

- Respecter les recommandations !  
(Heart Team, pas d'Ad Hoc sauf urgence...)
- Intérêt des outils (IVUS, FFR) pour caractériser des lésions intermédiaires