

# **L'impact des nouvelles recommandations ESC / EACTS 2010 sur notre pratique quotidienne**

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# Recommandations ESC/EACTS 2010

## Revascularisation myocardique

- 55 pages
- 41 tableaux
- 5 algorithmes

# 2 grands changements

- Rédaction des recommandations par un groupe mixte.

# 2 grands changements

- Rédaction des recommandations par un groupe mixte.
- Développement du concept de « Heart Team »

**Table 6** Recommendations for decision making and patient information

	Class <sup>a</sup>	Level <sup>b</sup>
It is recommended that patients be <u>adequately informed</u> about the potential benefits and short- and long-term risks of a revascularization procedure. <u>Enough time</u> should be spared for informed decision making.	I	C
The appropriate revascularization strategy in patients with MVD should be discussed by the Heart Team.	I	C

		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>		
<b>Multidisciplinary decision making</b>	Not mandatory.	Not mandatory.	Not required for culprit lesion but required for non-culprit vessel(s).	Required.	Required.	According to predefined protocols.
<b>Informed consent</b>	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>
<b>Time to revascularization</b>	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.
<b>Procedure</b>	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.

# Coup de frein pour l'ATC ad-hoc

<i>Ad hoc PCI</i>
Haemodynamically unstable patients (including cardiogenic shock).
Culprit lesion in STEMI and NSTEMI-ACS.
Stable low-risk patients with single or double vessel disease (proximal LAD excluded) and favourable morphology (RCA, non-ostial LCx, mid- or distal LAD).
Non-recurrent restenotic lesions.

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Non-recurrent restenotic lesions.
<b>Revascularization at an interval</b>
Lesions with high-risk morphology.
Chronic heart failure.
Renal failure (creatinine clearance <60 mL/min), if total contrast volume required >4 mL/kg.
Stable patients with MVD including LAD involvement.
Stable patients with ostial or complex proximal LAD lesion.
Any clinical or angiographic evidence of higher periprocedural risk with <i>ad hoc</i> PCI.



# Maladie coronaire stable

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For symptoms	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	—

- Si sténose > 50% responsable des symptômes sous OMT
- Revasc justifiée

# Maladie coronaire stable

For prognosis	Left main >50% <sup>d</sup>	I	A
	Any proximal LAD >50% <sup>d</sup>	I	A
	2VD or 3VD with impaired LV function <sup>d</sup>	I	B
	Proven large area of ischaemia (>10% LV)	I	B
	Single remaining patent vessel >50% stenosis <sup>d</sup>	I	C
	IVD without proximal LAD and without >10% ischaemia	III	A

## 6.2 Impact of ischaemic burden on prognosis

The adverse impact of demonstrable ischaemia on clinical outcome [death, myocardial infarction (MI), ACS, occurrence of angina] has been well recognized for over two decades.<sup>13,38</sup> While symptomatic patients with no or little evidence of ischaemia have no prognostic benefit from revascularization, asymptomatic patients with a significant mass of ischaemic myocardium do.<sup>13,38</sup> Most recently, in

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

→ Profite le plus aux : TC, IVA I, MVD, ischémies étendues (>10%)

# Choisir le type de revascularisation

**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.
1VD or 2VD - non-proximal LAD	IIb C	I C	—
1VD 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 1VD, ostium/shaft)	IA	IIa B	4, 54
Left main (isolated or 1VD, 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

It is not feasible to provide specific recommendations for the preferred method of revascularization for every possible clinical scenario. Indeed it has been estimated that there are  $>4000$  possible clinical and anatomical permutations. Nevertheless, in comparing

En faveur de l'ATC : mono ou bitronc. (hors IVA I)

Pas d'ATC pour scores très élevés (III)

Dans les autres cas, l'ATC est une option même si préférence pour la chirurgie

# Choisir le type de revascularisation

**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	I A	IIa B	30, 31, 50, 51
3VD simple lesions, full functional revascularization achievable with PCI, SYNTAX score $\leq 22$	I A	IIa B	4, 30–37, 53
3VD complex lesions, incomplete revascularization achievable with PCI, SYNTAX score $> 22$	I A	III A	4, 30–37, 53
Left main (isolated or IVD, ostium/shaft)	I A	IIa B	4, 54
Left main (isolated or IVD, distal bifurcation)	I A	IIb B	4, 54
Left main + 2VD or 3VD, SYNTAX score $\leq 32$	I A	IIb B	4, 54
Left main + 2VD or 3VD, SYNTAX score $\geq 33$	I A	III B	4, 54

and whether surgery is offered on site or not. Non-emergent high-risk PCI procedures, including those performed for distal left main (LM) disease, complex bifurcation stenosis involving large side branches, single remaining coronary artery, and complex chronic total occlusion (CTO) recanalization, should be performed by adequately experienced operators at centres that have access to circulatory support and intensive care treatment, and have cardiovascular surgery on site.

SCA

# SCA ST-

**Table 12** Recommendations for revascularization in non-ST-segment elevation acute coronary syndrome

Specification	Class <sup>a</sup>	Level <sup>b</sup>	Ref. <sup>c</sup>
An invasive strategy is indicated in patients with: • GRACE score >140 or at least one high-risk criterion. • recurrent symptoms. • inducible ischaemia at stress test.	I	A	64, 68-70
An early invasive strategy (<24 h) is indicated in patients with GRACE score >140 or multiple other high-risk criteria.	I	A	63, 64, 66, 70-72
A late invasive strategy (within 72 h) is indicated in patients with GRACE score <140 or absence of multiple other high-risk criteria but with recurrent symptoms or stress-inducible ischaemia.	I	A	59, 66, 68
Patients at very high ischaemic risk (refractory angina, with associated heart failure, arrhythmias or haemodynamic instability) should be considered for emergent coronary angiography (<2 h).	IIa	C	—
An invasive strategy should not be performed in patients: • at low overall risk. • at a particular high-risk for invasive diagnosis or intervention.	III	A	59, 68

Importance de la stratification du risque (GRACE)

# SCA ST+

**Table 13** Recommendations for reperfusion strategies in ST-segment elevation myocardial infarction patients

	Class <sup>a</sup>	Level <sup>b</sup>	Ref. <sup>c</sup>
Implementation of a well-functioning network based on pre-hospital diagnosis, and fast transport to the closest available primary PCI-capable centre is recommended.	I	A	74, 75
Primary PCI-capable centres should deliver 24 h per day/7 days per week on-call service, be able to start primary PCI as soon as possible and within 60 min from the initial call.	I	B	76, 82, 102-105
In case of fibrinolysis, pre-hospital initiation by properly equipped EMS should be considered and full dose administered.	IIa	A	81
With the exception of cardiogenic shock, PCI (whether primary, rescue, or post-fibrinolysis) should be limited to the culprit stenosis	IIa	B	96, 106, 107
In PCI-capable centres, unnecessary intermediate admissions to the emergency room or the intensive care unit should be avoided.	III	A	94, 108, 109
The systematic use of balloon counterpulsation, in the absence of haemodynamic impairment, is not recommended.	III	B	96, 97

- Importance du réseau
- Privilégier ATC 1a

# Choix du stent



## Indications for drug-eluting stent

DES with proven efficacy should be considered by default in nearly all clinical conditions and lesion subsets, except if there are concerns or contraindications for prolonged DAPT

**Table 35** Relative clinical contraindications to the use of drug-eluting stents

- |   |
|---|
| <ul style="list-style-type: none"><li>• Clinical history difficult to obtain, especially in the setting of acute severe clinical conditions (STEMI or cardiogenic shock).</li></ul> |
| <ul style="list-style-type: none"><li>• Expected poor compliance with DAPT, including patients with multiple comorbidities and polypharmacy.</li></ul>                              |
| <ul style="list-style-type: none"><li>• Non-elective surgery required in the short term that would require interruption of DAPT.</li></ul>  |
| <ul style="list-style-type: none"><li>• Increased risk of bleeding.</li></ul>   |
| <ul style="list-style-type: none"><li>• Known allergy to ASA or clopidogrel/prasugrel/ticagrelor.</li></ul>   |
| <ul style="list-style-type: none"><li>• Absolute indication for long-term anticoagulation.</li></ul>  |

# Conclusion

- Collégialité de la décision (heart team, protocolisation)
- Coup de frein pour l'ATC ad hoc
- DES par défaut
  - Discordance recommandations / LPPR
  - Relancer le débat DES

# Conclusion

- Place centrale de l'ischémie
- Globalement favorables pour la chirurgie (I A)
- Résurgence de la « chirurgie sur site »