Importance of the *Clinical Cardiologist* in Coronary Artery Bypass Graft Surgery Decision-making

To the Director

Coronary artery bypass graft surgery was incorporated into clinical practice more than 50 years ago and is still questioned compared with percutaneous coronary intervention in triple vessel and trunk disease, especially in the diabetic patient. (1) The time has come to make things clear. Complete coronary artery bypass grafting has been a practice extended for decades in most cardiac surgery services in the world. (2)

The new clinical practice guidelines on myocardial revascularization recommend surgical treatment as an option in left main coronary disease and involvement of three coronary arteries with proximal anterior descending artery obstruction, showing a philosophical and ethical change in the treatment of coronary heart disease.

In the era of exponential and unstoppable growth of coronary intervention, the role of the clinical cardiologist is undeniable. In February 2013, *Lancet* published (3) the 5-year SYNTAX results, which demonstrate significant differences in favor of coronary surgery for patients with intermediate to high SYNTAX score (Tables 1 and 2). From all the previously published SYNTAX studies comparing percutaneous revascularization with surgery, we have drawn some reflections:

1. *The need to classify each patient with the SYNTAX score, prior to making the therapeutic decision most advisable for him.*
2. *The treatment of choice for patients with medium and high SYNTAX score should be surgical, preserving the stent for patients at low risk, which remains a safe alternative.*
3. *In 65% of all patients with left coronary artery disease (SYNTAX >32) and 79% of patients with 3 affected vessels (SYNTAX >22), coronary artery bypass surgery has advantages at 3 years, which are maintained at 5 years.*
4. *The development of the "Heart team" concept, a multidisciplinary group formed by the clinical cardiologist, interventional cardiologist, surgeon, and patient, who will ultimately make the right decision for himself.*
5. *The examination of the coronary anatomy should be analyzed by the heart team in all patients, to decide in daily practice which is the best therapeutic option for each case.*

The new studies on ischemic cardiomyopathy with multivessel disease confirm the superiority of surgery versus coronary intervention, with a reduction in morbidity and mortality. (4) Revascularization clinical practice guidelines emphasize that "ad hoc" coronary angiography is only indicated in patients with unstable angina and that in other cases the patient should have enough time to choose his treatment, advised by the *clinical cardiologist*. (2, 5)

The Heart Area of Hospital Universitario de A Coruña was launched in 1996, together with cardiologists, anesthesiologists, intensivists, nurses, etc., placing the patient in the center of the care process, who will ultimately decide the most appropriate therapy for himself, and which sometimes is not the one advised by us. The quality of a Service of Cardiology or Cardiac Surgery is the result of a good teamwork, which is everyone's responsibility. It is time to re-emphasize the importance of the "Heart team". Its quality results in greater satisfaction of users and center staff, favors the relationship and teamwork and improves the use of available resources, reducing morbidity and mortality.

More than a decade ago JM Revuelta et al. (6) analyzed the changes in the patients' profile, who want more information about their illness, the treatment that will be applied and the outcome. The patients' level of demand has increased: let us inform them of

Table 1. SYNTAX score results at 5 years in three-vessel coronary heart disease

	Surgery	Stent	%
Nº of patients	549	546	
Death	9.2 (-5.4%)	14.6	0.006
Cardiac death	4 (-5.2%)	9.2	0.001
AMI	3.4 (-7.3%)	10.6	0.001
Acute stroke	3.4	3	0.66
Death + cardiac death + AMI	14	22	0.001
New coronary revascularization	12.6 (-12.6)	25.4	0.001

AMI: Acute myocardial infarction. When analyzing the SYNTAX score, no significant differences are found between both groups of patients for the low risk score (<23), but the difference is significant for intermediate (23-32) and high (>32) risk.

Table 2. SYNTAX score results at 5 years in left main coronary artery disease

	Surgery	Stent	p
Nº of patients	348	357	
Death	14.6	12.8	0.53
Cardiac death	7.3	8.6	0.46
AMI	4.8	8.2	0.1
Acute stroke	4.3	1.5	0.03
Death + cardiac death + AMI	20.8	19	0.57
New coronary revascularization	15.5	26.7	0.001

AMI: Acute myocardial infarction. When analyzing the SYNTAX score, no significant differences are found between both groups of patients for the low and intermediate risk score, but the difference is significant for high risk (>32), where surgery has better results than stent.

all their possibilities!

The *clinical cardiologist* sends the patient to a hemodynamic study for the evaluation of his ischemic heart disease and in most cases returns with multiple stents. I wonder: How long will we tolerate this erroneous therapeutic behavior? Has the clinical cardiologist been involved in the percutaneous revascularization decision of his patient?

Hemodynamics is a devouring specialty, and the industry supports its exponential development. Every month new stents appear, without the previous ones having been evaluated in the long term. The patient is the center of our medical practice and has every right to know the best procedure for the mid- and long term outcome of his coronary heart disease and not make the decision in the hemodynamics lab with the catheter inserted in his artery.

Dialogue in the hemodynamics lab: The interventional cardiologist says to the patient: "You have the 3 main arteries with occlusions, do you want your problem to be solved now?" The answer is obvious ... We should not forget that some patients want less aggression to their body, even with worse results.

We re-emphasize the importance of the "Heart team" in decision-making, albeit some interventional cardiologists ignore these recommendations. The general population should be informed. We should denounce by all possible means what is happening, without creating unnecessary social alarm. Citizens must know that decisions in cardiology must be agreed with a team work, with the patient at the center of the care process.

This decision is an act of medical and ethical responsibility towards the patient, who relies on us. Scientific Societies should endorse that decisions in cardiology-surgery are made within the context of the "Heart team"; the *clinical cardiologist* has the floor.

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