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EDITORIAL POINT OF VIEW

Heart Team: who is The Captain?

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Heart Team is, of course, a part of a medical team. In a definition of this term, a free online dictionary (Segen's Medical Dictionary. © 2012 Farlex, Inc) says that the medical team approach recognizes that today it is impossible that one person is capable to realize all the diagnosis and therapy necessary for any illness.

The importance of Heart Team concept developed after two important achievements in the field of cardiovascular therapy: the Syntax Score, the transcatheter aortic valve implant (TAVI) and any other hybrid cardiac intervention. Of course, other complex therapeutic situations necessitate the contribution of a team, but those cited before are important landmarks.

The Syntax Score developed after the publishing of the Syntax Study by Serruys and all the Syntax Investigators in 2009 (1). It showed the conditions in which coronary artery by-pass surgery (CABG) is superior or not to the percutaneous coronary intervention (PCI) in revascularization in coronary artery disease. The developed *Syntax Score* was an *anatomic score*. Later on Nam and colab (2) developed a *Syntax functional score* based on the coronary flow reserve and Capodano and colab (cited by 3) developed a third more sophisticated score, a *Syntax clinical score* based on the presence of heart failure, renal failure and, of course, the age of the patient

For sure, to apply such a complex Syntax Score in the revascularization process necesitates the collaboration of the cardiologist, the interventional cardiologist, the heart surgeon, the intensive care specialist, the anesthesiologist ... means a compex medical team

The second example is the development of the TAVI procedure. Not any cardiologist can implant a transcatheter aortic valve (TAVI), but a cardiac interventionist. And more: some cardiac interventionists practice only implanting coronary stents and are not licensed to practice TAVI. So the branch in this tree is a forth degree branch: a physician – a cardiologist – a cardiac interventionist – a TAVI specialist.

But the patient who needs TAVI is commonly old, frail, with associated heart failure or coronary artery diseaese, with associated co-

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morbidities. Who is the doctor who takes care and is responsible for the entire pathology of such a person? In a paper in 2013, Osnabrugger and colleagues showed that in Europe and the USA about 290 000 patients are candidates for TAVI, with new 27 000 patients coming every year (4). About 40% of them are initially considered candidates for surgery, but finally the risk of surgical intervention is considered too high. These figures are really impressive.

In the European and American Guidelines on Valvular Heart Disease (5,6) the decision of performing surgery or TAVI in such patients is directed sharp to the Heart Team and this is a Class I indication.

The examples in which collaboration between different sub-specialists in taking decisions in cardiology may continue with carotid revascularisation, grafts for aortic aneurysms, other percutaneous valvar interventions and the list becomes longer and longer. The problem extends to the so called silo-bound professional societies (7), where collaboration between specialities is compulsory and sometimes too complex. A good example is the JNC 8 guidelines on High Blood Pressure published in 2014 (8). The JNC 8 Committee includes 42 North American Professional Societies, such as cardiology, internal medicine, neurology, nephrology, geriatry, general practice etc. It took 11 years to complete this new guideline from the previous one (JNC 7 – 2003). The huge professional team was completed by a representative from the USA official body in the field – the Heart, Lung and Blood Institute (NHLBI) in Bethesda. The controversies between specialists were so sharp, that some of them retired officially from the team, because they did not aggree to sign the final version of the guideline. Even the representant from Bethesda retired. NHLBI declared that, from that moment on, the institute will not participate to any new American guideline ellaboration, it will only accept to be informed about the final results. All these show how difficult is to work in the complex reality of medicine of today, joining together so complex knowledge coming through the participation of so many specialists.

Coming back, who is the captain of different medical teams?

Let us remind that medical teams have very difficult tasks in different fields of clinical medicine. A good example is in the field of oncology, the so called Tumour Board. We may imagine the hard work in front of such a team.

But who is the captain of a Heart Team?

It depends. For the heart team ellaborating a guideline there is no single captain. The captain is the consensus of all the authors regarding every phrase of the guideline. If somebody is finally not convinced, he or she leaves the vessel, like in the JNC 8 case.

For the classical therapeutic team, the captain remains the main decided therapeut, be he/she surgeon, interventionist, cardiologist etc.

But we may have other sort of therapeutic decisions. Recently, I assisted to the discussion of choosing the best therapy for a very complex congenital disease in a newborn. A young doctor proposed a very risky but radical solution. An old member of the team argued in favour of a much more secure, but less radical procedure. Finally, the team decided in-between, for a procedure which was either enough radical and enough safe.

So... who is the Captain of a Heart Team?

The Captain is.... the internal medicine specialist! Does this guy live anymore?

I am afraid not.

So, the Captain is.... that guy of middle age, who puts together the intempestive solutions of the young and the too wise solutions of the old. And he or she ellaborates and applies the winning midway solution.

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