CORONARY PATIENTS ANTECHAMBER OF THE CARDIAC INSUFFICIENCY

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To receive the warmest greeting from Dominican Republic loaded with appreciation to the Organizing Committee of this second symposium international of Cardiology Dr. Cosme Argerich, especially dedicated to our eternal master Dr. Carlos Alberto Bertolasi and Dr. Luis Vidal.

As the threshold of heart failure is underpinned by represents more solid evidence of risk or damage to the heart muscle, initial trigger cascade continium that will lead to cardiac pathology growing in recent years, chronic coronary patient approach the heart failure; which, with its burden of morbidity and mortality accumulates merit to be considered one of the largest impact on global health costs.

As you know, the reduction in mortality from acute myocardial infarction, after of the advent of the coronary unit (which Dr. Bertolasi was its creator in the Argentina in Hospital Argerich, more than 40 years ago), along with increased survival of the world's population have become factors catalysts for the increase in the prevalence of heart at the last 30th, failure as a result of the remarkable growth of patients with acute coronary events that abound today in the outpatient Cardiology worldwide consultations sequels. It seems, with said Berolasi than "save lives in coronary heart disease, undesirable effect is the increase of heart failure".

I encourage you to consider the following clinical scenarios to describe chronic coronary spectrum:

- patients with chronic stable angina: this group if same defines an atherosclerotic, uncomplicated, disease that can become unstable in their evolution; but their clinical stratification allows us to have an impact on the natural history of this condition. Since infarction in risk coronary anatomy can give us the pattern for a more judicious therapeutic strategy and thus decide on "all at once", with the aim of achieving the goals of treatment or medical surgery, endovascular surgical.
- Chronic stroke, which was long the classic of the chronic coronary, that or that patient who survived a stroke with a greater or lesser degree of damage concept myocardial and formerly by the contemplative infarction, handling apart from a higher mortality rate 30% prior to the advent of coronary units, unknown clearly target not infartada myocardial fiber residual ischemia or phenomena as the remodeled, inadequate hypertrophy, apoptosis, and other concepts that today make us consider management of acute myocardial based a reperfusion on time and efficient, thinking about the survival of heart muscle and early to establish a management that improves survival and/or the quality of life away from the patient risk definition infarction.
- History of unstable angina, concept which impels us to not consider that the solution of angina is "leave it to chronic" and thus manage an entity with less risk; but everything otherwise imposed on us in the broad sense of

the word-interventionist approach and deploy a mechanical risk patient stratification and decide the most judicious therapeutic, as a result strategy.

- History of coronary revascularization, either this endovascular or surgical. Because if we start from the premise that this therapeutic decision translates an unsubstantiated and significant coronary disease, risk factors for coronary heart disease, risk and possible prior history of heart attack; myocardial This patient deserves a strict follow-up, already or surgery re myocardial revascularization or endovascular intervention mean the "end process", if not rather an extenuating circumstance event, limitation of myocardial damage and, in certain scenarios, reduction of mortality.
- Survivor cardiopulmonary resuscitation, for the usual scene of important that often accompany these patients advanced atherosclerotic heart disease and the possibility of recurrence of these boxes with deadly results. Also inherent in this suffocating clinical picture, myocardial impairment becomes kick of chronic heart failure.
- History of acute cardiogenic pulmonary edema, because conceptually this scenario holds a participation of important ischemia the heart muscle, being a great mortality table when the substrate is necrosis. Addition is often an expression of debut coronary disease or progression of atherosclerotic plaque, not so much "temporary abandonment of the prescribed medical treatment". This chart, which translates an important commitment diastolic and usually systolic function preserved, unfolds as an interesting opportunity to intervene early in the genesis of heart failure and change history.
- Hypertensive emergency history. This condition encloses an assault to one of the so-called "target organs" hypertension, with endothelial aggression and atherothromboses data. The affected organ may not be the heart; but the status of systemic atherosclerosis, makes us consider coronary participation in this entity and therefore justified approach from the point of view of the chronic coronary disease since this way stratification would we handle different expressions of the atherothromboses with better results.
- Diabetes. This statement can generate controversy; but more and more we see the complex behavior of diabetes the ischemic heart disease, the poor performance of therapeutic interventions in these patients, and the frequency with which our actions medical results late in this population; patient surgery with bad beds, which involved complex injuries in the framework of renal failure and with evidence of harm which has gone unnoticed; myocardial This is why in the diabetic cardiovascular risk stratification is justified. In addition, recent work is evident behavior similar to patients with a history of acute myocardial infarction, prognosis regarding major follow-up coronary events, which categorizes diabetes as an important factor for coronary heart disease risk.

Arterial hypertension is a risk that share the ischemic and the cardiac insufficiency, where we see the role of hypertension in the initial ateroesclerótico process, as in linked non-adaptive ventricular hypertrophy, as well as the chain of left ventricular function deterioration phenomena associated with myocardial initial acute coronary event insult and recurrent ischemia that perpetuates the process of cell death and the ventricular remodeling with its negative impact on left ventricular function ventricular remodeling factor.

These considerations make us reflect on the role of hypertension, beyond the demonstrated impact of increased risk of mortality associated with tension figures observed in studies; by what we have to tackle hypertension as a "syndrome" in which the load vascular, angiotensin and its waterfall, oncogenes, calcium, the expression of the fetal Phenotype in the myocyte, fibrosis, not Adaptive hypertrophy with his propensity to ischemia and veiled threat of arrhythmia, hypertension makes an agglutinative factor in the spectrum of heart failure and coronary artery disease. These factors underpin the integral management of arterial hypertension from the perspective of their clinical implications in the short and long term, which makes drugs with ACEI therapy, ARA-II and CA ++ antagonists are part of the intelligent management of this disease, its impact on "what is not seen". In addition other medications, such as the beta-blockers play an important role in the therapeutic, when the response of the central nervous system is triggered, stress or mediated by damage to the heart muscle associated with acute coronary event. Note then that binomial ventricular hypertrophy / ischemic become the nexus for the cardiac insufficiency.

Clinical scenarios that define Coronario chronic patient acute myocardial infarction in the most decisive for its direct impact on the heart muscle and the sequence of events triggers, as well as by the narrow margin of time that we use to reduce the impact on myocardial infarction, sudden coronary artery occlusion. Recently, thanks to nuclear magnetic resonance, it has been able to document live impact on fiber myocardial reperfusion therapy and we see the relationship of risk - size of myocardial - microvascular obstruction, myocardial phenomena associated with time efficiency thereof and therapy is performed. Here we see that the limited time available for reperfusion therapy has an impact leading makes it necessary that our approach to the management of acute myocardial infarction don't consider its link to heart failure, which we must also take into account after the chronicity of the event. Therapy event acute coronary not grants us long time (< 12 hours at most) as opposed to the management of the chronic coronary where we have time to run a therapeutic strategy, mediated by the clinical condition of the patient.

> Chronic coronary patients therapeutic objectives are: improving quality of life, fade the progression of angina, limit the occurrence of events, prevention of cardiac insufficiency and reduce mortality.

Improvement of the quality of life is evaluated by various measurement protocols being of Minnesota one of the most socorridos; but the fundamentals are the absence or important improvement of clinical symptoms that make the perception of pathology (angina and dyspnea), with no or little interference in the everyday life of the patient, with a vocation for permanence of these benefits at the time. This is why therapy must pursue this goal as a fundamental premise.

To achieve the therapeutic objectives, risk stratification is the cornerstone for the support of a successful therapeutic approach. In this order we have non-invasive procedures

- Hierarchization of symptoms by an inclusive interrogation.
- Effort test
- Stress Echocardiogram
- Study of nuclear medicine

The common element in these procedures is the determination of the magnitude of the symptoms, infarction in risk definition and the ability to infer the coronary territory involved. This sets the risk inherent to the patient, essential resource for establishing relevant handling. All comparisons, always more committed patient benefits from a more radical strategy with improvement of symptoms and prognosis, sustained over time.

Knowledge of coronary Anatomy sometimes becomes an obsession for the medical team which follows the patient, although information is strengthened when it is accompanied by a physiological analysis that allows us to real clinical stratification of the patient, as well as the relevance of the chosen therapeutic strategy.

Since the test effort until the coronary angioscopia, passing by the heels of calcium, the coronariografia, the angiotomografia, pharmacological stress or markers radioisotope, all these procedures have their value forecast; but it is representative set the usefulness of each of these tools, taking into account the sensitivity and the cost of the study, because it is not question of "do everything" but "everything"

Utility to get information on coronary anatomy with the computed angiography or the angiography is not under discussion, which challenges us is to define the vulnerable plaque in the context of the vulnerable patient, which increase our ability to predict events and eventually make more striking our therapeutic intervention. This is so because the size of the Board is not as important as the quality of the same in the prediction of events, which explains not be so starring in death and reinfarto globally; follow-up studies of percutaneous angioplasty and myocardial revascularization surgery but when we accompany this approach to the correct patient stratification and sensible pharmacological management results are better.

Current evidence supporting global as therapeutic chronic coronary patient strategy where we define the intervention as an action to change the natural history of the disease and thus we see medical management, handling endovascular or surgical treatment options available, not antagonistic.

Thus ponderamos exercise, quit smoking, diet cardiosaludable, handling stress and medical monitoring as a platform on which the relevant medication,

patterned stratification by medical follow-up, coronary angioplasty revascularization (with or without pump) and "hybrid" intervention surgery will play its role.

Thank you