RREBOOT: on a mission to change clinical practice guidelines for the treatment of heart attack survivors

06/08/2021

CNIC and the Mario Negri Institute in Milan (Italy) coordinate REBOOT, a project that aims to study whether treatment with beta-blockers is beneficial for patients who have suffered a myocardial infarction.

The Centro Nacional de Investigaciones Cardiovasculares (CNIC) and the Mario Negri Institute in Milan are coordinating a joint project called REBOOT that will determine the true benefit of beta blocker therapy for heart attack survivors.

Beta blockers have been used to treat heart attack patients for many decades because they reduce heart rate, blood pressure, and the incidence of arrhythmias, thus improving heart function and blood flow in the coronary arteries.

However, while these drugs also have a very favorable safety profile, they are not free of side effects that can limit life quality.

Current guidelines recommend beta blocker therapy for these patients. But these recommendations are based on trials carried out several decades ago, before the advent of reperfusion therapy, when the treatment of myocardial infarction was much less advanced than it is today. Thus, at the time of the those early trials, the blocked coronary artery was not reopened, and patient prognosis after an infarction was much worse than it is now.

Beta blockers have been used to treat heart attack patients for many decades because they reduce heart rate, blood pressure, and the incidence of arrhythmias.

Today, patients who survive an acute myocardial infarction without loss of cardiac pump function have a much better prognosis, and it is therefore necessary to test whether beta blocker therapy...
continues to offer a clinical benefit for these patients.

**REBOOT** is an international trial that will include 8600 patients surviving a myocardial infarction with a left ventricular ejection fraction above 40%. Recruitment began in 2018, and to date 5200 patients have been included.

In the trial, patients are randomly assigned to beta blocker therapy (with the drug type and dose determined by the treating physician) or no treatment.

REBOOT involves the participation of several thousands of researchers at more than 100 small, medium, and large hospitals in Spain and Italy. REBOOT principal investigator Dr. Borja Ibáñez is clear that the goal of the project is to change current practice guidelines for the clinical management of patients surviving a myocardial infarction.

The trial, coordinated by the [CNIC Clinical Trials Coordination Unit](https://www.cnic.es/en/noticias/rreboot-mission-change-clinical-practice-guidelines-treatment-heart-attack-survivors), collects data on the incidence of death, reinfarction, and hospitalization for heart failure in the study population over the first 3 years after a heart attack.