radcliffe
cardiology

Title: ESC 23: RIGHT: Post-PPCI Anticoagulation in STEMI Patients
Participants: Dr Giles Montalescot and Dr Yan Yan
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Dr Giles Montalescot

" So. I'm Professor Gilles Montalescot. I'm an interventional cardiologist. I work at Pitie Salpetriere Hospital in Paris.

Dr Yan Yan

I'm Dr. Yan Yan from Beijing Anzhen Hospital. A cardiologist. And I'm the study coordinator of the RIGHT trial.

Current Practice and Prolonging Anticoagulation in STEMI Patients Undergoing Primary PCI

Dr Yan Yan

There is a big, huge gap between the clinical practice and guidelines. The post-procedure anticoagulation aims to prevent the ischemic or symbolic index after primary PCI. The real-world data suggests that it was used frequently after primary PCI and may improve the clinical outcome. However, there was no randomised trial to identify the risk-benefit of prolonging or prolonged anticoagulant after primary PCI. So that is why we want to conduct this trial.

The Rationale Behind a 48-hour Delay in Anticoagulation

Dr Giles Montalescot

You know, 48 hours corresponds to the stay in the CCU after primary PCI. So it's really the period when you wonder if you should anticoagulate these patients after primary PCI, starting sometimes with a big thrombus burden in these patients. So clearly we said, let's go and anticoagulate these patients for at least 48 hours and see if there is a benefit on clinical ischemic endpoints. Yeah.

Study Design and Patient Population

Dr Yan Yan

The RIGHT Trial is investigators initiated multicenter, randomised, placebo-controlled, double-blind superiority trial to test wider routine use of low-dose post-procedure anticoagulation with a sphere to placebo in STEMI patient undergoing primary PCI. In contemporary clinical practice, in a cohort of STEMI patients.

Dr Giles Montalescot

Three anticoagulant regimens were used because clearly we don't know which one is more effective. And the practice shows that bivalirudin can be used, enoxaparin can be used, or unfractionated bind can be used and some prefer one or the other. So we used the three according to the practice and the centre had to pick one and the patients were randomised to receive this drug or the placebo of this drug during at least 48 hours.

Dr Yan Yan

The main age of the patient was 68 years old, with 21% of female and with 25% with diabetes and 55% with hypertension and the median time of door-to-balloon time with 74 minutes and with 98% with aspirin and 95% with P2Y12 inhibitors before angiography.

Dr Giles Montalescot

As you can see it's, a low to intermediate race population of STEMI is undergoing primary PCI reflecting current practice. No cardiogenic shock patients, no heart failure patients, no big [indistinct] at the time of primary PCI. So a low to intermediate-risk population.

Key Findings

Dr Yan Yan

The main result of our trial is two years of post-procedure anticoagulation at a very low risk. Anticoagulant is safe, but does not give improved ischemic outcome.

Dr Giles Montalescot

Yeah, it's a neutral trial, which is, I think, important information. There was no benefit on the ischemic side of prolonging anticoagulation when many of us do that every day. And the safety also was very good. There was no signal on bleeding with peri-procedure anticoagulation at the doses that we picked for this trial. So clearly, if you think it's important to prolong anticoagulation in your patient, you can do it, it's safe with these strategies. But globally, we didn't see a benefit in this population, I think it will influence guidelines.

Take-Home Messages

Dr Giles Montalescot

Because if you look at the guidelines, they do not say anything for now, they tend to say that after PCI, in general, you stop anticoagulation, but primary PCI is very special. So we have a randomised study now to say if you want to stop it, it's fine. We have data now supporting that. Now, when we look at the three anticoagulation regimens, there was heterogeneity among them and enoxaparin anticoagulation looked better with a trend for favourable results. So that's something that we would like to explore in the future because of course, it's only hypothesis-generating. So for practice, if you think that your patient deserves prolonged anticoagulation because there is a high risk of atherosclerotic events, maybe you would like to pick this regimen which behaves better than the other two.

Next Steps

Dr Giles Montalescot

So what are the next steps? Maybe another study with enoxaparin, because this is the best results that we had in the study.