An outline of the EAST-AFNET 4 Study

- EAST-AFNET 4 stands for early treatment of atrial fibrillation for stroke prevention trial. We all know that a healthy atrium is a beautiful, well-organized, almost aesthetic structure. And that atrial fibrillation damages this structure, and actually causes permanent damage even after a full, a few weeks of atrial fibrillation. Prior trials trying to demonstrate that restoring and maintaining sinus rhythm, so-called rhythm control therapy, improves outcomes by preventing this damage, fail to demonstrate benefit. But they actually showed that patients treated with rhythm control, as we used to do it 20 years ago, had more hospitalizations. Therefore, as a community, we have reverted back to a strategy of, give rate control to everyone initially, and then only use rhythm control to improve symptoms. Now in the trial, we tested whether a modern, systematic rhythm control therapy can improve outcomes, compared to this usual care.

Benefits of early AF treatment

Early rhythm control therapy, when delivered on top, in addition to anticoagulation and therapy of concomitant cardiovascular conditions, reduces a composite of cardiovascular death, stroke, and hospitalisation for heart failure or acute coronary syndrome by 21%. So, you can prevent every fifth event compared to usual care. This benefit is achieved without a safety signal. And one of the big take-home messages from EAST-AFNET 4, is that the trial found a way to deliver rhythm control safely. And that we can now try to implement safe ways to implement rhythm control therapy to all patients in a safe way, to achieve this current development.

Observations from clinical practice

Currently, we only offer rhythm control to one in five patients in Europe when they are first diagnosed with atrial fibrillation. And considering the efficacy and safety of rhythm control therapy as tested in EAST, I believe we should at least consider, actually offer, rhythm control therapy to all patients with newly diagnosed atrial fibrillation. It's very simple. Whenever you think anticoagulation in a patient with atrial fibrillation, we also think rhythm control. Rhythm control therapy should be part of the management of all patients with recently diagnosed atrial fibrillation and stroke risk factors. It needs to be delivered safely.

Take-home messages

We are continuously interrogating the EAST-AFNET 4 data set. Here in Copenhagen, tomorrow, we'll show you the data on how sex as a category, interacts with early rhythm control. At the Heart Rhythm Congress, we'll show you some really exciting data on the interaction of multiple comorbidities with early rhythm control, trying to address the question whether we should rather treat the sick and frail patients, or those that are easily maintained in science, within the young and healthier ones. We are doing further sub-analysis, and I do believe that there is also room for additional trials, testing populations that are difficult to treat. For example, patients after acute stroke, or patients with HFpEF and atrial fibrillation.