Multispecialty Outpatient Cardiovascular Association

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PCI Benefit in Angina Clarified in New ORBITA-2 Analysis

PARIS — After the first major prospective study to associate percutaneous intervention (PCI) with symptom relief in stable angina captured international attention, a new analysis of the sham-controlled trial is back in the news showing that it is not necessarily patients with ischemia who respond.

"Symptoms — not the severity of disease — is what powerfully predicts the clinical benefit from PCI," Florentina A. Simadar, MD, a cardiologist with the Imperial College London, United Kingdom, reported at the Congress of the European Association of Percutaneous Coronary Interventions (EuroPCR) 2024.

According to the new results, "the more typical the clinical angina symptoms, the greater the likelihood of angina reduction following PCI," she explained.

Although the anatomical severity of coronary disease has provided the rationale for revascularization even among patients with silent ischemia, this new analysis of data from the ORBITA-2 trial has revealed that lesions are not a useful way to predict symptom relief, she pointed out.

This secondary analysis, presented at EuroPCR and simultaneously published in the *Journal of the American College of Cardiology*, is the latest step toward understanding the relationship between revascularization and symptom control.

The First ORBITA

In ORBITA, the first of these studies by the same group, PCI was evaluated on top of anti-anginal therapy and was shown to have little effect on exercise time or angina symptom control. However, that study was not sham-controlled.

In the double-blind sham-controlled ORBITA-2 trial, patients with stable angina were evaluated when they were off antianginal therapy. At the end of 12 weeks, the mean daily angina score in the PCI group was half the score in the placebo group, a result associated with a more than twofold increase in the odds ratio (OR) of a reduction in angina (OR, 2.21; $P < .001$).

FYI:

- Transcatheter-Based Intervention and Tetralogy of Fallot, Small Left Ventricle and Atrial Fibrillation (Afib), Aspirin Free Treatment Post-PCI

New TAVI Platform Adds More Valve Sizes to Choose From

PARIS — Intermediate valve sizes are at least as safe and effective as the standard sizes now available for transcatheter aortic valve implantation (TAVI), according to an international randomized trial.

In a head-to-head comparison, the LANDMARK trial looked at valves from the new balloon-expandable Myval® by Merril Life Sciences and compared them with the balloon-expandable Sapien® from Edwards Lifesciences and the self-expanding Evolut® valve from Medtronic.

The new Myval platform offers multiple valves sized at 1.5 mm intervals, while the other two have valves that are generally sized at intervals of 3.0 mm.

The platform with intermediate sizes provided a nonsignificant numerical advantage in both safety and efficacy over its rivals, Patrick W. Serruys, MD, PhD, from the Department of Cardiology at the University of Galway in Galway, Ireland, reported at the Congress of the European Association of Percutaneous Coronary Interventions 2024.

The LANDMARK Trial

The trial enrolled 768 patients at 31 sites in 16 countries. They were randomized in a 1:1 fashion to the new platform or to one of the standards to compare the concept of intermediate valves with contemporary standards. New TAVI Platform Adds More Valve Sizes to Choose From (medscape.com)

IV Thrombolysis Offers No Benefit for Mild Stroke

BASEL, SWITZERLAND — Minor ischemic stroke patients with intracranial occlusion should not be treated with IV thrombolysis, a new trial has concluded.

Results from the randomized controlled trial TEMPO-2 showed no benefit from treatment with tenecteplase following ischemic stroke. In addition, investigators found a small increased risk for symptomatic intracranial hemorrhage (ICH) and more deaths in the tenecteplase group compared with the control group.

The research suggests that although it makes sense to open up vessels in patients with minor stroke, they didn't do better with thrombolysis.

"This is not the result we were hoping for, but I think the question of whether to treat these minor stroke patients who are not disabled has now been answered," lead investigator Shelagh Coutts, MD, University of Calgary, Calgary, Alberta, Canada, said.

"After these results, I think we should scan these patients, admit them, give them dual antiplatelet therapy and IV fluids, and watch them like a hawk. If they deteriorate, we can intervene at that point." IV Thrombolysis Offers No Benefit for Mild Stroke (medscape.com)

Guidelines on Rapid BP Reduction in Acute Ischemic Stroke Challenged

New findings challenge the practice of rapidly lowering blood pressure (BP) in acute ischemic stroke to allow for speedy thrombolysis.

The observational cluster study showed that patients treated in hospitals that followed the guideline-recommended practice of rapidly reducing BP did no better — and actually showed a trend toward worse outcomes — than those treated in hospitals that did not lower BP, even though this meant fewer patient received thrombolysis.

"We found insufficient evidence to recommend active blood pressure lowering in patients with ischemic stroke who have blood pressure levels exceeding the guidelines but are otherwise eligible for thrombolytic therapy," senior study author, Nyika Kruyt, MD, PhD, Leiden University Medical Center, the Netherlands, concluded.

"Our results suggest that if the blood pressure is too high for thrombolysis, then it is best to wait and only treat with thrombolysis if the blood pressure drops spontaneously," Kruyt told *Medscape Medical News*.

The findings were presented at the European Stroke Organisation Conference (ESOC) Annual Meeting and also published online on May 16 in *The Lancet Neurology*.

Guidelines Without Evidence?

Owing to concerns about high BP increasing the risk for intracerebral hemorrhage after thrombolysis, the original trials evaluating thrombolysis in stroke set an arbitrary threshold of 185/110 mm Hg, which has been incorporated into stroke guidelines

'Big Breakthrough': New Low-Field MRI Is Safer and Easier

For years, researchers and medical companies have explored low-field MRI systems (those with a magnetic field strength of less than 1 T) — searching for a feasible alternative to the loud, expensive machines requiring special rooms with shielding to block their powerful magnetic field.

Most low-field scanners in development are for brain scans only. In 2022, the US Food and Drug Administration (FDA) cleared the first portable MRI system — Hyperfine's Swoop, designed for use at a patient's bedside — for head and brain scans. But the technology has not been applied to whole-body MRI — until now.

In a new study published this month in *Science*, researchers from Hong Kong described a whole-body, ultra low–field MRI.

"This is a big breakthrough," said Kevin Sheth, MD, director of the Yale Center for Brain & Mind Health, who was not involved in the study. "It is one of the first, if not the first, demonstrations of low-field MRI imaging for the entire body."

The device uses a 0.05 T magnet — one sixtieth the magnetic field strength of the standard 3 T MRI model common

Coronary Artery Disease: The New Big C

Robert A. Harrington, MD: Hi. I'm Bob Harrington, and I'm here at the American College of Cardiology (ACC) meetings in Atlanta. I always love to use these meetings as an opportunity to catch up with friends and colleagues to talk about what they're working on.

For those of you who have listened to the podcast for a long time, you know that one of the things I really like to do is to talk to physician writers. Sometimes, it's fiction; sometimes, it's nonfiction. Today, we're going to talk to a colleague from Stanford who has written a new book on heart disease and cancer. We'll get into that in a moment. I'm here with my good friend and colleague, Mike McConnell. Mike is the chief health officer at Toku and is also a clinical professor of medicine at Stanford — and still seeing patients and reading images.

Michael V. McConnell, MD, MSEE: Yes.

Harrington: Excellent.

McConnell: Great to be here.

Harrington: Mike, you sent me a copy of the book, and I really enjoyed reading it. It's a nice read with a provocative title. Tell us what the title is.

McConnell: The title is *Fight Heart Disease Like Cancer*.

Sudden Cardiac Death on My Watch

Harrington: That grabs your attention. You're a preventive cardiologist. You're also an engineer. We're going to unravel both of those as to how you came to this. One thing I really like is that you use both stories and evidence.

As I would expect from a clinical scientist, it's heavy on the evidence. You're not saying anything that's not based in the literature, but you're telling stories. There are some pretty powerful stories. One of the early stories is the unfortunate death of your father-in-law. That seems like it profoundly affected how you think about this.

McConnell: I would say that was the first time I thought that I needed to write a book someday.

Upcoming:

- Available in June to present the next M & M Case?
    - Contact Sarah to volunteer please: Cook@michgovstrategy.com