

PEARL Study

A Pilot Randomized Clinical Trial of Early Coronary Angiography Versus No Early Coronary Angiography for Post-Cardiac Arrest Patients Without ECG ST Segment Elevation

What is the PEARL study?

The **PEARL study** is a clinical trial evaluating the safety and effectiveness of coronary angiography (also known as heart cath) performed within 120 minutes of hospital arrival in a population of post-cardiac arrest patients without ST segment elevation on their electrocardiograms (ECGs).

This study will help answer the question, "Does an early heart cath improve survival and prevent heart muscle damage after a cardiac arrest without ST segment elevation on their ECGs?"

What is cardiac arrest?

Cardiac arrest occurs when the heart suddenly stops pumping blood. In adults, this often happens after a heart attack. Cardiac arrest is a major public health issue, and survival rates are poor.

Who can participate?

If you're taken to Mayo Clinic Hospital, Saint Marys Campus, after a cardiac arrest and your physician determines your cardiac arrest is due to heart disease, you will be randomly assigned (like a flip of a coin) to one of two groups. If you qualify for the PEARL study, the decision to enroll to either group must be made in 120 minutes or less.

- **Group 1: Early heart cath.** Patients who arrive at the hospital after an out-of-hospital cardiac arrest without ST segment elevation will receive an early heart cath within 120 minutes of arrival.
- **Group 2: Control group.** Patients who arrive at the hospital after an out-of-hospital cardiac arrest without ST segment elevation will receive standard post-arrest treatment. Once stable, these patients may undergo heart cath prior to hospital discharge if needed, but not within the first six hours of admission.

Both groups will be treated with the usual post-arrest treatment, including cooling of the body (hypothermia treatment), which is thought to protect the brain from injury that occurred when the heart stopped pumping blood during the cardiac arrest.

Informed consent

Because patients with out-of-hospital cardiac arrest are usually unconscious and unable to give consent to enroll in the study, the Institutional Review Board (IRB), a group that oversees research in humans, can allow the researcher to place a patient in the study when: the patient is unable to speak for himself or herself because of life-threatening injury or illness, and the decision to begin the study must be made as soon as possible. Every effort to locate the patient's family or legal representative will be made. Patients who wish to not be included in the PEARL study should use the email address or telephone phone number below to request an opt-out wristband that indicates to the researchers that the patient has declined to be part of this study.

Tell us what you think about this research and help Mayo Clinic doctors gain answers to this important question. **To request an opt-out wristband** or for more information about this study, [email the research team](#) or call **507-538-7178**.

The PEARL study is a multicenter clinical trial initiated by the University of Arizona. The principal investigator for the [PEARL study at Mayo Clinic](#) is Jacob C. Jentzer, M.D. For more information, visit the [PEARL study main NIH website](#).

Questions or concerns also can be addressed to the Mayo Clinic Institutional Review Board at 507-266-4000 or you can [email the IRB](#).