

TOMAHAWK trial #ESCCongress

Immediate angiography after out-of-hospital cardiac arrest

Conclusion



Early coronary angiography in out-of-hospital cardiac arrest (OHCA) patients without ST-segment elevation is not superior to a delayed/selective approach.

Impact on clinical practice



The usefulness and timing of coronary angiography in OHCA survivors without ST-segment elevation are uncertain. In up to one-third of these patients, acute MI is the cause of cardiac arrest, suggesting that diagnostic coronary angiography and potential percutaneous coronary intervention could be beneficial.

Study objectives



The TOMAHAWK trial examined whether immediate coronary angiography for treating or ruling out acute coronary events in OHCA survivors without ST-segment elevation is beneficial for all-cause mortality at 30 days compared with initial intensive care unit (ICU) assessment and delayed/selective angiography.

Who and what?

- Age \geq 30 years
- Successful resuscitation after OHCA
- Possible cardiac cause of arrest
- No ST-segment elevation on post-resuscitation ECG
- Shockable or non-shockable rhythms were included

554 patients

randomised 1:1
at hospital admission

Immediate
coronary
angiography



Initial ICU
assessment



Delayed/selective
angiography



Primary endpoint

All-cause mortality at 30 days

Early angiography was not superior to a delayed/selective approach



HR: 1.28 (95% CI: 1.00-1.63);
log-rank $p=0.058$

No differences in the primary endpoint were observed in pre-specified subgroups, including those with shockable versus non-shockable rhythm.

Composite secondary endpoint

All-cause death or severe neurological deficit at 30 days

More frequent in the immediate angiography group

Relative risk 1.16; 95% CI 1.002-1.34