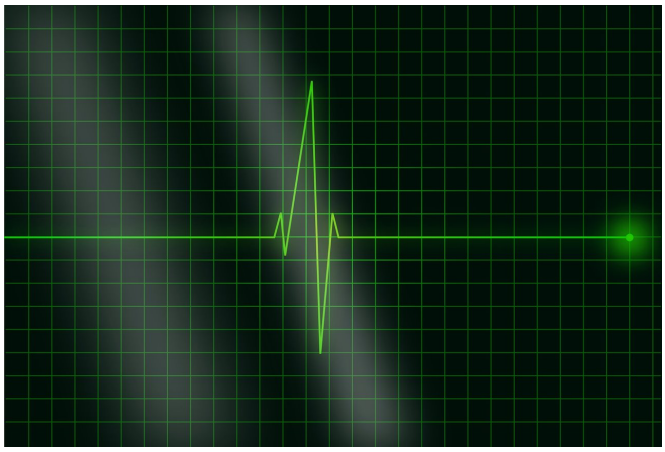
Angina drug fails to improve outcomes after successful revascularisation

31 August 2020



Credit: CC0 Public Domain

Trimetazidine administered after successful percutaneous coronary intervention (PCI) does not improve outcomes in patients with chronic or acute coronary syndromes, according to results of the ATPCI trial presented in a Hot Line session today at ESC Congress 2020.

Angina refers to constricting pain or discomfort in the front of the chest or in the neck, jaw, shoulder, or arm due to reduced blood flow to the heart. It can occur during acute coronary syndromes (ACS) and chronic coronary syndromes (CCS).

PCI improves prognosis in acute patients and can alleviate symptoms in chronic patients who do not respond to medication. However, previous studies have shown that angina recurs in 30% of patients despite antianginal therapy and successful PCI. There are limited contemporary data on the prognostic benefits of antianginal drugs in post-PCI patients.

The randomized ATPCI trial investigated the impact of trimetazidine added to standard therapy after PCI. Unlike typical angina medications, which improve blood flow by relaxing and widening the blood vessels, trimetazidine protects against myocardial ischaemia by improving the heart's metabolism and favoring the use of glucose.

The trial enrolled 6,007 patients who had undergone successful PCI, either elective for stable angina (n=3,490) or urgent for unstable angina or non-ST-elevation myocardial infarction (n=2,517). Patients were randomly assigned to trimetazidine or placebo.

The primary efficacy endpoint was the composite of cardiac death; or hospitalization for a cardiac event; or recurrent/persistent angina leading to adding, switching or increasing the dose of antianginal drugs or coronary angiography.

After a median follow-up of five years, the primary efficacy endpoint occurred in 700 (23.3%) patients in the trimetazidine group and 714 (23.7%) patients in the placebo group (p=0.7). There was no difference between groups in the rate of side effects.

Principal investigator Professor Roberto Ferrari of the University of Ferrara, Italy said: "The trial shows that trimetazidine does not improve outcomes or symptoms after successful PCI in patients with acute and chronic coronary syndromes."

More information: Roberto Ferrari et al. Efficacy and safety of trimetazidine after percutaneous coronary intervention (ATPCI): a randomized, double-blind, placebo-controlled trial, *The Lancet* (2020). DOI: 10.1016/S0140-6736(20)31790-6

Provided by European Society of Cardiology