

New strategy can help determine heart attack in patients within one hour

April 13 2015

A new strategy to rule-out and rule-in heart attacks in emergency departments will help physicians treat patients faster, found a clinical trial published in *CMAJ* (*Canadian Medical Association Journal*).

Acute myocardial infarction (MI) is a common cause of death and disability around the world. Early diagnosis is critical for treatment and survival.

Swiss and Spanish researchers conducted a clinical trial to determine whether a new technique, previously tested in a small pilot study, would be effective in determining whether a patient has had a [heart attack](#). They enrolled 1320 patients who visited the [emergency department](#) with suspected acute MI and applied the high-sensitivity cardiac troponin T 1-hour algorithm to blood samples.

"Introducing the high-sensitivity cardiac troponin T 1-hour algorithm into clinical practice would represent a profound change and it is therefore important to determine if it works in a large patient group," states Dr. Tobias Reichlin, Division of Cardiology, University Hospital Basel, Switzerland.

With the algorithm, the researchers were able to determine that 786 (60%) of patients did not have an acute MI ("rule-out"), 216 (16%) were "rule-in" and 318 (24%) were to be observed because results were not conclusive.

"This rapid strategy incorporating high-sensitivity cardiac troponin T baseline values and absolute changes after the first hour substantially accelerates the management of patients with suspected acute MI by allowing safe rule-out as well as accurate rule-in of acute MI in 3 out of 4 patients," the authors conclude.

More information: *Canadian Medical Association Journal*,
www.cmaj.ca/lookup/doi/10.1503/cmaj.141349

Provided by Canadian Medical Association Journal

Citation: New strategy can help determine heart attack in patients within one hour (2015, April 13) retrieved 19 November 2023 from <https://medicalxpress.com/news/2015-04-strategy-heart-patients-hour.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.