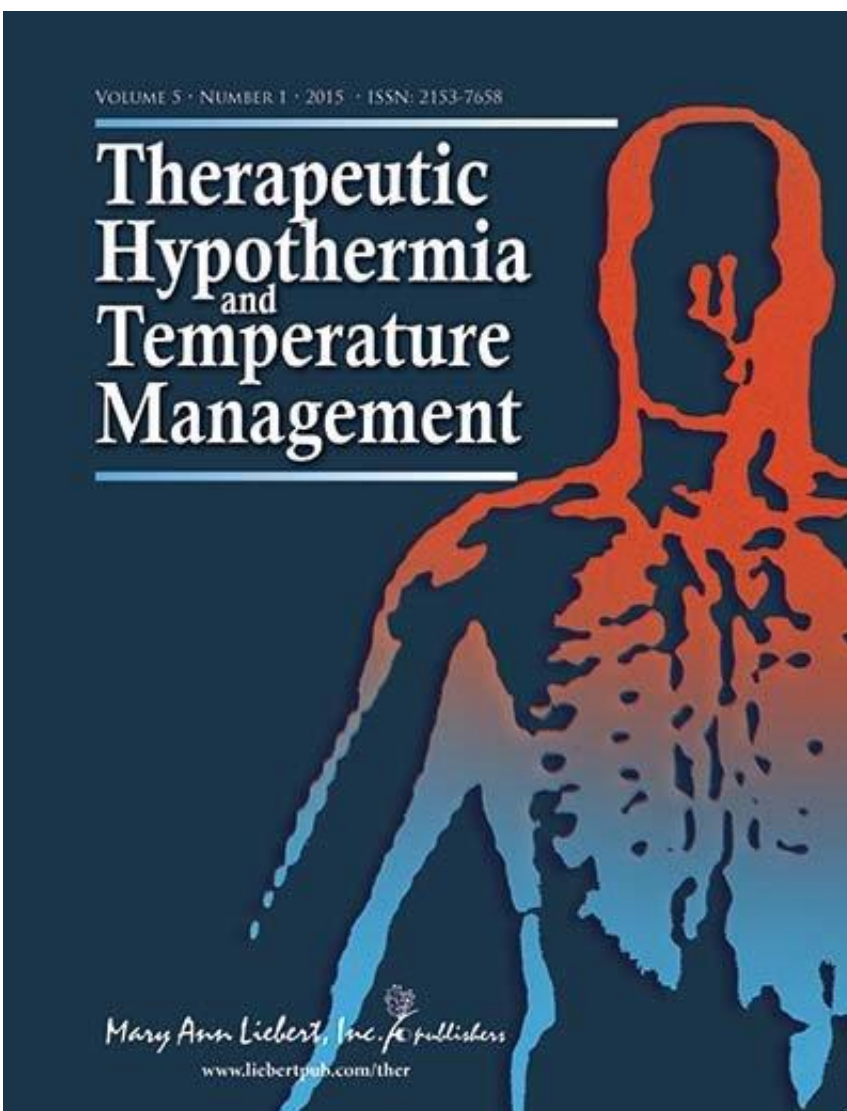


Less extensive damage to heart muscle/therapeutic hypothermia following acute myocardial infarction

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Credit: Mary Ann Liebert, Inc., Publishers

After an acute myocardial infarction, patients treated with rapid lowering of body temperature by combined cold saline infusion and endovascular cooling had less heart muscle damage and reduced incidence of heart failure. Therapeutic hypothermia was especially protective against heart muscle damage in patients with a large area of myocardium at risk according to an analysis of two clinical trials published in *Therapeutic Hypothermia and Temperature Management*.

In 'Therapeutic hypothermia for the treatment of [acute myocardial infarction](#) - combined analysis of the RAPID MI-ICE and the CHILL-MI trials,' David Erlinge and an international team of researchers and clinicians analyze the results of two clinical studies that compared treatment of patients following a heart attack with either rapid lowering of body temperature to a target of 33oC or standard of care before intervention to restore normal blood flow to the heart. In both trials, hypothermia was induced using a combination of rapid infusion of cold saline and endovascular cooling and was continued for one to three hours after the heart blockage was cleared and blood flow was restored.

'These observations are very exciting to the field of cardiology because they demonstrate that rapid cooling procedures prior to catheterization reduce the extent of myocardial infarction and improve function,' says W. Dalton Dietrich, III, Ph.D., editor-in-chief and kinetic concepts distinguished chair in neurosurgery, professor of neurological surgery, neurology and cell biology, University of Miami Leonard M. Miller School of Medicine.

More information: The article is available free on the *Therapeutic Hypothermia and Temperature Management* (<http://online.liebertpub.com/doi/full/10.1089/ther.2015.0009>) website until July 9.

Provided by Mary Ann Liebert, Inc

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