

# Complete revascularisation improves outcome in heart attack patients

September 1 2014

---

In patients being treated for heart attack, complete revascularisation of all significantly blocked arteries leads to better outcomes compared to a strategy of unblocking just the "culprit" artery responsible for the heart attack, according to a new study presented today at ESC Congress 2014.

Results of the Complete versus Lesion only PRimary-PCI Trial (CvLPRIT), presented as a congress Hot Line may be practice-changing when considered together with some other recent trials, said study investigator Anthony Gershlick, MD, from University Hospitals of Leicester NHS Trust, Glenfield Hospital, in Leicester, England.

"Until now there have been conflicting data regarding the optimal management of [patients](#) who, whilst undergoing primary [percutaneous coronary intervention](#) (P-PCI) after myocardial infarction (MI) are also found to have lesions in their non-infarct related artery (N-IRA)," noted Professor Gershlick.

"Current guidelines from ESC and AHA /ACC recommend treating the infarct-related artery (IRA) only, but the results of our study demonstrate a highly significant benefit with a strategy of complete revascularisation instead. These findings should suggest strongly that all lesions be treated before the patient is discharged," he added.

CvLPRIT included 296 [heart attack](#) patients who presented at seven UK interventional cardiology centres. Prior to treatment with P-PCI the patients were randomised to receive IRA-only revascularisation (n=146)

or to have complete revascularisation of both the IRA as well as all N-IRAs (n=150) that were shown to be significantly blocked.

For patients in the complete revascularisation group, the IRA was treated first, followed by the N-IRAs - preferably in the same sitting, but definitely during the same index hospital admission.

The study found that one year after the procedure, patients in the complete revascularisation group had significantly better outcomes compared to those who had only their IRA revascularised, based on a composite endpoint of major adverse cardiac events (MACE) including: all-cause mortality, recurrent MI, heart failure and ischaemic-driven revascularisation. MACE occurred in 21.2% of the IRA-only arm versus 10.0% of the complete revascularisation group (hazard ratio [HR] 0.45;  $p=0.009$ ), and the difference between the two groups was seen early ( $p=0.055$  at 30 days).

Not surprisingly, procedure time and contrast volume load were significantly higher in the complete revascularisation group compared to the IRA-only group (55 vs. 41 mins,  $p$

The CvLPRIT results correlate strongly with those of the earlier Preventive Angioplasty in Myocardial Infarction (PRAMI) Trial, which was presented during last year's ESC Hot Line session.

"The PRAMI trial reported clear clinical benefit in treating both IRA and N-IRAs at the index P-PCI, but there was some criticism of the trial design," said Professor Gershlick. "As a result, PRAMI has not led to widespread changes in clinical practice, with IRA-only revascularisation at P-PCI remaining by far the more common practice."

However, he said the results of CvLPRIT reinforce the PRAMI results and strengthen the argument for a strategy of complete revascularisation

at the time of a patient's index hospital admission.

"The early separation of the curves in CvLPRIT suggests a delayed staged out-patient complete strategy may not be as effective," he added.

Provided by European Society of Cardiology

Citation: Complete revascularisation improves outcome in heart attack patients (2014, September 1) retrieved 23 April 2024 from

<https://medicalxpress.com/news/2014-09-revascularisation-outcome-heart-patients.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.