

The randomised Complete versus Lesion-only PRimary percutaneous coronary Intervention Trial: Cardiovascular Magnetic Resonance imaging substudy (CvLPRIT-CMR)

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Plain English summary

CvLPRIT-CMR study

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Plain English summary

Specialist heart doctors increasingly treat patients who suffer large heart attacks as a matter of urgency with a procedure performed under local anaesthetic. The blocked blood vessel (artery) that causes the heart attack is opened by inserting a small metal scaffold (stent) at the blockage to hold the artery open. Up to 50% of patients treated in this way also have other narrowed, but not totally blocked, heart arteries. Two recent studies in patients with heart attacks and multiple narrowed arteries have suggested that treating all of the narrowed arteries may be better than just treating the blocked artery. However, there is concern that the longer procedure, and putting in more stents, may cause more damage to the heart. We studied 203 patients having a heart attack who were randomly assigned to have only the blocked artery (105 patients) or all the narrowings treated (98 patients) in seven hospitals in England. We assessed the amount of heart muscle damage that occurred using magnetic resonance imaging. Patients were more likely to have more than one area of heart muscle damage if all of their heart arteries were treated than if only the blocked artery was treated (22% vs. 11% of patients). However, the percentage of the heart that was damaged was not increased (12.6% vs. 13.5%) and the heart function 3 days and 9 months after treatment was similar with both treatments. The results of this study provide reassurance that specialists treating patients with a heart attack can open more than one narrowed artery without increasing the total amount of heart damage.

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