

Channel 4 presenter: Now to a method of treating heart attack victims that could save 250 lives a year. A government's study has concluded that angioplasty, inflating a small balloon in a blocked coronary artery, will also save money and reduce time spent in hospital. Heart attack patients are usually treated with clot-busting drugs⁽¹⁾ but the Health Secretary wants angioplasty rolled out⁽²⁾ across the country at specialists' centres. Here is our science correspondent, Tom Clarke.

Tom Clarke: The minutes following a heart attack are crucial. Without prompt treatment, the lack of blood getting to the heart causes irreparable damage. Today, the Department of Health announced they hope to provide 97% of patients in England primary angioplasty within two hours. It's an invasive treatment but should save more lives.

Pr Roger Boyle: You'd get a higher survival rate, that's the first thing. But you also reduce the risk of complications. About 250 fewer strokes as complications as a result of switching⁽³⁾. And then, a lesser need for reintervention over the coming months and years. So it's getting the right treatment at the right time and then precluding⁽⁴⁾ the need for further intervention later on.

Clarke: Nearly all heart attack patients get clot-busting drugs, antithrombolytic agents to unblock arteries and restore blood flow. Angioplasty could cut death rate from 7% to 5% saving some 240 lives a year.

The procedure physically removes the blockage that causes a heart attack. A thin wire⁽⁵⁾ is threaded⁽⁶⁾ through an artery in the patient's leg up to the heart and guided towards the blocked artery. Once there, the surgeon inflates a small balloon attached to the wire. This unblocks the artery and leaves behind a small implant called a stent that holds the artery open keeping the heart muscle healthy. Campaigners welcome the announcement as long as the NHS doesn't undermine⁽⁷⁾ existing drug treatment while upgrading to angioplasty.

Dr Mike Knapton: Getting this wrong will mean that the benefits don't accrue⁽⁸⁾ in terms of mortality and fewer complications. So, actually, there is a slight risk or slight worry if this is rushed that you'll throw out a first-class thrombolysis clot-busting drug service and have a second-class PCR service.

Clarke: There's much to do in three years with a huge variation in who gets the different treatment. In London, between 97% and 100% of patients receive primary angioplasty. But in Lancashire and South Cumbria only 8% get the treatment and in Cheshire and Merseyside just 2%. To deliver on the target, angioplasty facilities like this will have to need staffing 24 hours a day. The ambulance crews⁽⁹⁾ will have to get people here well inside the two-hour window. So, for patients to benefit most of course someone has to call 999 as soon as they think it's a heart attack as time is everything.

Tom Clarke, Channelfour.

Lexical helpline:

1. **clot-busting drugs:** thrombolytic drugs
2. **roll out (v):** launch, start
3. **switch (v):** change suddenly
4. **preclude (v):** prevent
5. **a wire:** a thin, flexible piece of metal
6. **thread (v):** pass through
7. **undermine (v):** diminish something gradually
8. **accrue (v):** increase
9. **a crew:** staff onboard