



Title	PCI in Acute Myocardial Infarction
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Aim

To assess the scientific evidence comparing percutaneous coronary intervention (PCI) and thrombolysis in acute myocardial infarction.

expert group of Norwegian cardiologists coordinated by an HTA expert from the Norwegian Centre for Health Technology Assessment (SMM).

Conclusions and results

Twenty randomized clinical trials were identified and assessed. However, three older trials were known only from conference abstracts and were excluded. A meta-analysis of the remaining 17 studies yielded the following main conclusions:

- Primary PCI is a better treatment than thrombolysis for patients with acute myocardial infarction admitted to an invasive center. The combined outcome of death, reinfarction, or stroke in the acute phase is nearly halved, one such outcome is avoided for every 16 patients treated with PCI. Results more than one year after the infarction still significantly favor PCI.
- Patients with acute infarction can be safely transported to an invasive center if the transport time is less than 3 hours.
- As both time to treatment and hospital- and operator volume are important for the outcome, the optimal treatment for acute myocardial infarction will differ in different places.

Recommendations

Because of the importance of reducing time to treatment, good routines are needed to minimize all delays. Clear treatment algorithms should be established for each geographical area.

Methods

Randomized clinical trials comparing PCI and thrombolysis as acute treatment of myocardial infarction were identified from references in the Cochrane review "Primary angioplasty versus intravenous thrombolysis for acute myocardial infarction" (43), MEDLINE, EMBASE and the abstract collections from recent cardiology conferences. The assessment was performed by an