Captopril but not mononitrate or intravenous magnesium reduced short-term mortality after suspected myocardial infarction

_**Intervention**_

Antiplatelet therapy was recommended and fibrinolytics were considered for all patients. Patients were randomly assigned as early as possible in a 2 × 2 factorial design. Half the patients received captopril (6.25-mg initial dose; 12.5 mg 2 h later; 25 mg 10 to 12 h later, then 50 mg twice/d for 28 d). Half the patients received mononitrate (30 mg initially and after 10 to 12 h, then 60 mg each morning for 28 d).

Half the patients received intravenous MgSO₄ (8 mmol initial bolus over 15 min and then 72 mmol over 24 h). Other treatments were at the discretion of the treating physicians.

**Main Outcome Measures**

5-week and 1-year total mortality.

**Main Results**

Analysis was by intention to treat. Captopril compared with placebo had a lower mortality rate at 5 weeks (7.19% vs. 7.69% [95% CI for the 0.5% absolute risk reduction [ARR], 0.07 to 0.9; \( P = 0.02 \); relative risk reduction [RRR], 7%; number needed to treat, 200; CI, 18 to 1366]*) but not at 1 year (11.99% vs. 12.53% [CI for the 0.54% ARR, -0.02% to 1.2%; \( P = 0.1 \); RRR, 4.3%)*). Neither mononitrate compared with placebo nor MgSO₄ compared with open control was associated with a reduction in mortality at either 5 weeks (7.34% vs. 7.54% for mononitrate vs. placebo and 7.64% vs. 7.24% for MgSO₄ vs. no treatment) or at 1 year (12.17% vs. 12.35% for mononitrate and 12.44% vs. 12.08% for MgSO₄).

**Conclusions**

Oral captopril reduced 5-week mortality in patients with suspected acute myocardial infarction. Oral mononitrate or intravenous magnesium sulfate did not reduce either short- or long-term mortality.

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*Numbers calculated from data in article. Abstract and Commentary also published in ACP Journal Club 1995;123:44.