Mortality and Morbidity Risks of Emergency Coronary Artery Bypass Grafting Following Failed Percutaneous Transluminal Coronary Angioplasty

Ognjen [imi], Jan Maring, Jürgen Stein1, Thomas Meinertz1, Jörg Ostermeyer
Department of Cardiac Surgery and 1Department of Cardiology, St. Georg General Hospital, Hamburg, Germany

Aim. Analysis of the early results of coronary artery bypass grafting (CABG) following failed percutaneous transluminal coronary angioplasty (PTCA).

Methods. PTCA is used widely in the management of patients with coronary artery disease, and is an alternative to CABG. Some patients undergo emergency, urgent or elective CABG after the PTCA.

Results. Between January 1991 and March 1995, 3,520 patients were treated by PTCA. Sixty-one patients (1.7%) underwent emergency CABG following failed PTCA. Forty-six percent had single-, 33% double- and 21% triple-vessel disease. The mean number of bypass grafts was 1.9 ± 0.8. The mean time from the onset of coronary occlusion to the re-establishment of flow through the graft to the obstructed artery was 95.0 ± 24.3 min. Nine patients developed perioperative myocardial infarction. Hospital mortality was 6.6% (4 perioperative deaths).

Conclusion. Emergency CABG following failed PTCA is associated with increased mortality and morbidity risks even in the patients with short interval between the failed PTCA and surgical revascularization.

Key words: angioplasty, transluminal, percutaneous coronary; coronary artery bypass; emergencies