

# Clinical trials of oxygen therapy for acute myocardial infarction in all type of patients

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## 1 oxygen therapy

Trial	Treatments	Patients	Trials design and methods
<b>error vs control</b>			
Dekleva , 2004 n=NA	-	-	
<b>hyperbaric oxygen vs control</b>			
Sharifi , 2004 n=NA follow-up:	-	after percutaneous coronary intervention for acute myocardial infarction or unstable angina pectoris	
Swift , 1992 n=NA follow-up:	-	patients within 1 week of acute myocardial infarction	
Thurston , 1973 n=NA follow-up:	-	acute myocardial infarction	
Hot MI , 1997 n=112 follow-up:	-	Patients with an acute myocardial infarction who received recombinant tissue plasminogen activator	
HOT MI pilot , 1997 n=66 follow-up:	-	Patients with an acute myocardial infarction (AMI) who received recombinant tissue plasminogen activator	
<b>oxygen therapy vs control</b>			
Rawles , 1976 n=NA follow-up:	oxygen administered by MC mask throughout the first 24 hours versus air	myocardial infarction	
Ukholkina , 2005 n=NA follow-up:	-	patients with acute myocardial infarction	
Wilson , 1997 n=NA follow-up:	oxygen therapy versus control	patients presenting within 24 hours of onset of myocardial infarction	
<b>supersaturated oxygen vs control</b>			

continued...

Trial	Treatments	Patients	Trials design and methods
AMIHOT II , 2000 [NCT00175058] n=222/79 follow-up:	90-minute intracoronary supersaturated oxygen (SSO(2)) infusion in the left anterior descending artery infarct territory versus control	patients with anterior ST-segment elevation myocardial infarction undergoing percutaneous coronary intervention within 6 hours of symptom onset	
AMIHOT , 2007 n=NA follow-up:	hyperoxemic reperfusion for 90 min using intracoronary aqueous oxygen versus normoxemic blood autoreperfusion	patients with acute anterior or large inferior AMI undergoing primary or rescue PCI (<24 h from symptom onset) and successful PCI	
<b>Entonox vs placebo</b>			
Kerr , 1975 n=NA follow-up:	nitrous oxide 50% /oxygen 50% ('Entonox' analgesic apparatus) versus placebo	-	double-blind

## References

### Dekleva, 2004:

Stavitsky Y, Shandling AH, Ellestad MH, Hart GB, Van Natta B, Messenger JC, Strauss M, Dekleva MN, Alexander JM, Mattice M, Clarke D Hyperbaric oxygen and thrombolysis in myocardial infarction: the 'HOT MI' randomized multicenter study. *Cardiology* 1998;90:131-6 [[9778551](#)]

Shandling AH, Ellestad MH, Hart GB, Crump R, Marlow D, Van Natta B, Messenger JC, Strauss M, Stavitsky Y Hyperbaric oxygen and thrombolysis in myocardial infarction: the "HOT MI" pilot study. *Am Heart J* 1997;134:544-50 [[9327714](#)]

Dekleva M, Neskovic A, Vlahovic A, Putnikovic B, Beleslin B, Ostojic M. Adjunctive effect of hyperbaric oxygen treatment after thrombolysis on left ventricular function in patients with acute myocardial infarction *American Heart Journal* 2004;148:e14.

### Sharifi, 2004:

Sharifi M, Fares W, Abdel-Karim I, Koch JM, Sopko J, Adler D Usefulness of hyperbaric oxygen therapy to inhibit restenosis after percutaneous coronary intervention for acute myocardial infarction or unstable angina pectoris. *Am J Cardiol* 2004;93:1533-5 [[15194029](#)] [10.1016/j.amjcard.2004.03.009](#)

Sharifi M, Fares W, Abdel-Karim I, Petrea D, Koch JM, Adler D, Sopko J Inhibition of restenosis by hyperbaric oxygen: a novel indication for an old modality. *Cardiovasc Radiat Med* 2002;3:124-6 [[12974361](#)]

### Swift, 1992:

Swift PC, Turner JH, Oxer HF, O'Shea JP, Lane GK, Woollard KV Myocardial hibernation identified by hyperbaric oxygen treatment and echocardiography in postinfarction patients: comparison with exercise thallium scintigraphy. *Am Heart J* 1992;124:1151-8 [[1442480](#)]

### Thurston, 1973:

Thurston JG, Greenwood TW, Bending MR, Connor H, Curwen MP A controlled investigation into the effects of hyperbaric oxygen on mortality following acute myocardial infarction. *Q J Med* 1973;42:751-70 [[4606106](#)]

### Hot MI, 1997:

Shandling AH, Ellestad MH, Hart GB, Crump R, Marlow D, Van Natta B, Messenger JC, Strauss M, Stavitsky Y Hyperbaric oxygen and thrombolysis in myocardial infarction: the "HOT MI" pilot study. *Am Heart J* 1997;134:544-50 [[9327714](#)]

Stavitsky Y, Shandling AH, Ellestad MH, Hart GB, Van Natta B, Messenger JC, Strauss M, Dekleva MN, Alexander JM, Mattice M, Clarke D Hyperbaric oxygen and thrombolysis in myocardial infarction: the 'HOT MI' randomized multicenter study. *Cardiology* 1998;90:131-6 [[9778551](#)]

Laden G. HOT MI pilot study. Hyperbaric oxygen and thrombolysis in myocardial infarction *American Heart Journal* 1998;136(4 Pt 1):749.

### HOT MI pilot, 1997:

Shandling AH, Ellestad MH, Hart GB, Crump R, Marlow D, Van Natta B, Messenger JC, Strauss M, Stavitsky Y Hyperbaric oxygen and thrombolysis in myocardial infarction: the "HOT MI" pilot study. *Am Heart J* 1997;134:544-50 [[9327714](#)]

**Rawles, 1976:**

Rawles JM, Kenmure AC Controlled trial of oxygen in uncomplicated myocardial infarction. *Br Med J* 1976;1:1121-3 [[773507](#)]

**Ukholkina, 2005:**

Ukholkina GB, Kostianov Iu, Kuchkina NV, Grendo EP, Gofman IaB [Effect of oxygenotherapy used in combination with reperfusion in patients with acute myocardial infarction] *Kardiologiya* 2005;45:59 [[16007057](#)]

**Wilson, 1997:**

Wilson AT, Channer KS Hypoxaemia and supplemental oxygen therapy in the first 24 hours after myocardial infarction: the role of pulse oximetry. *J R Coll Physicians Lond* 1997;31:657-61 [[9409501](#)]

**AMIHOT II , 2000:**

Haude M. AMIHOT-II: A prospective, randomized evaluation of supersaturated oxygen therapy after percutaneous coronary intervention in acute anterior myocardial infarction *Herz* 2007;32 (8):669

Stone GW, Martin JL, de Boer MJ, Margheri M, Bramucci E, Blankenship JC, Metzger DC, Gibbons RJ, Lindsay BS, Weiner BH, Lansky AJ, Krucoff MW, Fahy M, Boscadin WJ Effect of supersaturated oxygen delivery on infarct size after percutaneous coronary intervention in acute myocardial infarction. *Circ Cardiovasc Interv* 2009;2:366-75 [[20031745](#)] [10.1161/CIRCINTERVENTIONS.108.840066](#)

**AMIHOT, 2007:**

O'Neill WW, Martin JL, Dixon SR, Bartorelli AL, Trabattoni D, Oemrawsingh PV, Atsma DE, Chang M, Marquardt W, Oh JK, Krucoff MW, Gibbons RJ, Spears JR Acute Myocardial Infarction with Hyperoxemic Therapy (AMIHOT): a prospective, randomized trial of intracoronary hyperoxemic reperfusion after percutaneous coronary intervention. *J Am Coll Cardiol* 2007;50:397-405 [[17662390](#)] [10.1016/j.jacc.2007.01.099](#)

Stone GW, Martin JL, de Boer MJ, Margheri M, Bramucci E, Blankenship JC, Metzger DC, Gibbons RJ, Lindsay BS, Weiner BH, Lansky AJ, Krucoff MW, Fahy M, Boscadin WJ Effect of supersaturated oxygen delivery on infarct size after percutaneous coronary intervention in acute myocardial infarction. *Circ Cardiovasc Interv* 2009;2:366-75 [[20031745](#)] [10.1161/CIRCINTERVENTIONS.108.840066](#)

**Kerr, 1975:**

Kerr F, Brown MG, Irving JB, Hoskins MR, Ewing DJ, Kirby BJ A double-blind trial of patient-controlled nitrous-oxide/oxygen analgesia in myocardial infarction. *Lancet* 1975;1:1397-400 [[49560](#)]

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