Doctor

PEARLS Practical Evidence About Real Life Situations



Hyperbaric oxygen may be effective for acute coronary syndrome

Clinical question

How effective is adjunctive hyperbaric oxygen therapy (HBOT) in acute coronary syndrome (ACS)?

Bottom line

There is some evidence that HBOT, following an episode of ACS, reduces the risk of death, reinfarction, significant dysrhythmias and major adverse coronary events, as well as limiting the peak levels of creatine phosphokinase and improving left ventricular ejection fraction. HBOT may also reduce the time required to achieve relief from cardiac ischaemic pain.

Caveat

The incidence of adverse effects was poorly assessed by the studies. The small number of studies, the modest numbers of patients, and the methodological and reporting inadequacies of the primary studies included in this review demand a cautious interpretation. At present, the routine adjunctive use of HBOT cannot be justified.

Context

ACS includes acute myocardial infarction and unstable angina, is common and may prove fatal. HBOT (breathing pure oxygen at high pressures in a specially designed chamber) will improve oxygen supply to the threatened heart and may reduce the volume of heart muscle that is damaged.

Cochrane Systematic Review

Bennett MH et al. Hyperbaric oxygen therapy for acute coronary syndrome. Cochrane Reviews, 2011, Issue 8. Article No. CD004818. DOI: 10.1002/14651858.CD004818.pub3. This review contains 6 studies involving 665 participants.

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