Threshold hemoglobin and mortality in people with stable coronary disease

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In this week's *PLoS Medicine*, Anoop Shah of University College London and colleagues report that, in people with stable coronary disease, there were threshold haemoglobin values below which mortality increased in a graded, continuous fashion. As well as a systematic review and statistical analysis of previous studies, the researchers conducted a retrospective analysis of patients from a prospective observational cohort.

Their findings suggest that there are thresholds of haemoglobin that are associated with increased risk of mortality in patients with angina or myocardial infarction, and, though limited by the observational nature of its results, the study supports the rationale for conducting future randomised controlled trials to assess whether haemoglobin levels are causal and whether clinicians should intervene to increase haemoglobin levels, for example by oral iron supplementation.

The authors say that "Irrespective of a possible causal, reversible relationship between

haemoglobin concentration and mortality, further research is warranted to assess what incremental prognostic value haemoglobin might offer in risk stratifying patients with stable coronary disease."

More information: Shah AD, Nicholas O, Timmis AD, Feder G, Abrams KR, et al. (2011) Threshold Haemoglobin Levels and the Prognosis of Stable Coronary Disease: Two New Cohorts and a Systematic Review and Meta-Analysis. PLoS Med 8(5): e1000439.

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