

The Controversial Evidence for Supplemental Oxygen – Return of the Third Man

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The World Health Organization recommends intraoperative ventilation with 80% inspired oxygen to reduce surgical site infection rates. This recommendation includes patients having cardiac surgery. The evidence for this was derived from a series of systematic reviews and meta-analyses of many randomised trials. I am aware of all relevant studies on this subject and I do not support their recommendation.

The reasons for my concerns were first published in 2017,¹ but the investigation needed to expose the flaws in science took another 2 years. I report a murky tale of questionable data integrity, deception, and intrigue.² Or in the words of Graham Greene's detective Calloway, "The smooth wall of deception had yet shown no real crack to his roaming fingers."

1. Myles PS, Kurz A. Supplemental oxygen and surgical site infection: getting to the truth. *Br J Anaesth*. 2017;119(1):13-15.
2. Myles PS, Carlisle JB, Scarr B. Evidence for compromised data integrity in studies of liberal peri-operative inspired oxygen. *Anaesthesia*. 2019;74(5):573-584.