Hyperbaric Oxygen Therapy Vital in Air Embolism

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Air embolism should be considered in any patient with sudden onset of severe cardiopulmonary and/or neurologic decompensation during gastroscopy, Australian doctors say. Dr Jennifer Ha and colleagues from Western Australia identified 13 cases of air embolism from a literature search and one from clinical practice. The main presenting symptoms of air embolism were neurological (n=9) and respiratory compromise (n=7) and the median age of the patients was 66 years old. The majority of cases (64.3%) had some form of mucosal breach seen on gastroscopy, the doctors wrote in the International Journal of Surgery. They noted that classical signs of the condition were inconsistent, with over 90% of the cases diagnosed with either a CT or echocardiogram and only one case recognised clinically. Once the condition is identified, insufflation should be discontinued and excess gas aspirated, and the patient should be ventilated with 100% FiO2 and tilted 30 degrees or more to the left, the authors advised “Hyperbaric oxygen therapy is the definitive lifesaving emergency treatment …as it provides an oxygen diffusion gradient forcing oxygen into and nitrate out of the bubble, thereby reducing the intravascular bubble size.” While the reported mortality rate for air embolism is over 90%, adherence to hyperbaric oxygen therapy may reduce that figure to 7%, they said.