Hyperbaric oxygen therapy for intensive care patients: position statement by the European Committee for Hyperbaric Medicine

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Abstract

(Mathieu D, Ratzenhofer-Komenda B, Kot J. Hyperbaric oxygen therapy for intensive care patients: indications and risk/ benefit balance. Diving and Hyperbaric Medicine. 2015;45 March;45(1):42-46.) Many of the accepted indications for hyperbaric oxygen treatment (HBOT) may occur in critically ill patients. HBOT itself may cause a number of physiological changes which may further compromise the patient's state. Guidelines on the management of critically ill patients in a hyperbaric facility have been founded on the conclusions of the 2007 European Committee for Hyperbaric Medicine (ECHM) meeting. With regard to patient management, HBOT should be included in the overall care of ICU patients only after a risk/benefit assessment related to the specifics of both the hyperbaric centre and the patient's clinical condition and should not delay or interrupt their overall management. Neither patient monitoring nor treatment should be altered or stopped due to HBOT, and any HBOT effects must be strictly evaluated and appropriately mitigated. With regard to the hyperbaric facility itself, the hyperbaric chamber should be specifically designed for ICU patients and should be fully equipped to allow continuation of patient monitoring and treatment. The hyperbaric chamber ideally should be located in, or around the immediate vicinity of the ICU, and be run by a sufficiently large and well-trained team of physicians, nurses, chamber operators and technicians. All devices to be introduced into the chamber should be evaluated, tested and acknowledged as safe for use in a hyperbaric environment and all procedures (standard and emergency) should be tested and written before being implemented.