

RESPONSE FROM DR. SADLER

Regarding the letter to UHM Editor about 24/7 chamber access in Hawaii, I spoke earlier today on the phone with Jim Chimiak and Dan Nord at DAN about this matter since DAN was consulted regarding hyperbaric chamber contacts and transport.

From the letter to the editor we all agreed that UH is taking aim at the ‘lack of 24/7 access in Hawaii’ statements made in several spots throughout the text.

While it is accurate that the UH chamber closed for three months – 10/19/17 to 1/14/18 – as stated in the letter from Dr. Steinemann (and verified by DAN records), the chamber had made a ‘soft’ reopening in January of 2018.

Rather than lack of chamber access, Dr. Steinemann notes that it was the severity of the case that prompted the personnel in Hawaii to opt to fly the injured diver to UCSD. She wrote in her letter:

‘The hyperbaric physician that fielded the call for this patient made the (I think correct) decision to have her flown to the mainland, rather than to Oahu, based upon her multiple organ failure, the time lapse (>1 day) before hyperbaric treatment was considered appropriate, and the fact that she was a visitor from the mainland.’

The permanent closure of hyperbaric facilities is becoming more of an issue for timely treatment, as everyone involved in this discussion can agree. What we can emphasize here is that everyone made the best decision possible in a difficult case. Additionally, Dr. Chimiak and Dan Nord both emphasized the clear thinking on the part of the UH personnel in sending this injured diver to the facility that could provide the best care at the time: UCSD.

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HBO₂ FOR RADIATION CYSTITIS**To the Editor:**

Efficacy studies are those designed to determine maximum achievable treatment response in a tightly controlled research environment, and the capacity for any demonstrated effect in everyday practice. Clinical decision-making places increasing emphasis on such high-level evidence, as do those who purchase health care. Efficacy data supporting hyperbaric medicine have long been in short supply. Practice decisions frequently rest on a mix of laboratory findings, the ‘matching’ of disease pathophysiology to a therapeutic mechanism, retrospective reports and uncontrolled prospective case series, alone or in any combination. When hyperbaric efficacy research does become available, then, it is deserving of particular attention, analysis and dissemination.

Oscarsson, et al. have generated one such example that serves to elevate efficacy evidence for hyperbaric oxygen (HBO₂) treatment of less severe yet common forms of radiation cystitis [1]. The term *radiation cystitis* refers to a collection of signs and symptoms (see Table). It is only the second randomized controlled trial to investigate hyperbaric oxygen HBO₂ therapy for this condition [2] and the first to demonstrate a statistically significant healing advantage over standard care. Importantly, the trial was registered with International Committee of Medical Journal Editors approved trial registries. A clinical trial (defined as prospective assignment of participants to one or more health-related interventions to evaluate outcomes) registration is essential if results are to be considered for publication in ICMJE participating journals.

Of 223 patients assessed, 87 met inclusion criteria and were subsequently enrolled. This 39% conversion ratio suggests that their reported improved outcomes are largely generalizable. Although not reported, the ‘Number Needed to Treat’ (NNT, an epidemiological measure used to communicate effectiveness of an intervention, and representing the average number of patients needed to be treated in order to produce one favorable outcome) was computed as an encouraging [3]. This value was the same for the subjective Expanded Prostate Index Composite (EPIC) and objective Late Radiation Morbidity Grading Scheme (LRMGS) scores, rounded up by convention from 2.56 and 2.17, respectively. An identical NNT was reported in the HBO₂ radiation proctitis randomized controlled trial [3]. One would hope that the authors’ decision to exclude from ‘Intention to Treat’