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Title: **HBO₂ departments offering services for emergent and urgent HBO₂ indications.**

INTRODUCTION

As of 2022 there are more than 1,000 hospitals in the United States that offer hyperbaric oxygen therapy[1]. Of these, fewer than 90 facilities offer 24/7 availability for emergent and urgent programs, with only 60 having the capacity to treat patients requiring critical care[2].

Due to the lack of facilities available to treat emergencies it is prudent to investigate if non emergent facilities are willing and able to accommodate treatment for non-scheduled stable emergent patients. Many patients with emergent hyperbaric indications are not critically ill, not intubated or require continuous intravenous medications and can be treated safely in the nearest appropriate facility. These conditions include but are not limited to: central retinal artery occlusion, carbon monoxide poisoning, arterial gas embolism, decompression illness and ischemic and failing flaps. Even if treated several times a day, often patients can go home in between treatments and continue any needed tailing treatments during daytime hours. Often, stable emergent hyperbaric patients are transferred to facilities that take emergency call, bypassing closer open facilities that can treat the emergent condition. There are incidents where the transferring hospital has a hyperbaric facility at the same location and transfers the patient due to lack of staff availability or willingness to treat emergent conditions.

Most insurers cover the cost of UHMS-approved indications and taking emergent patients should not be a fiscal loss to any facility. Many of these patients can be treated safely as outpatients, decreasing cost of transfer and admissions to an outside accepting facility. Treating patients locally without having to transport long distances can save money, decrease transport-related risk, speed the time to treatment which may lead to better clinical outcomes, and decrease crowding while not costing any hyperbaric department significant amounts of money. Any unstable patient, critically ill patient, or if patient transfer happens past daytime hours, then the usual manner or transfer should be initiated without delay.

ABSTRACT

- 1) Many patients with emergent hyperbaric conditions are stable and can be treated in any hyperbaric chamber that routinely treats patients.
- 2) Stable emergent patients should be treated as soon as possible at the closest appropriate facility to maximize patient outcome.

- 3) Decreasing unnecessary transfers and admissions by initiating HBO₂ treatment at the closest appropriate facility for the treatment of stable emergent patients during daylight hours should be the goal of all hyperbaric practitioners.
- 4) Any unstable patient, critically ill patients, or patients requiring a higher level of care should be transferred to a more appropriate hyperbaric facility in the usual manner.

RATIONALE

It is in the patient's best interest to be treated promptly for most emergent conditions. This is especially true during the day when most hyperbaric facilities are open, even if not taking call after hours. Many emergent conditions such as central retinal artery occlusion, carbon monoxide poisoning, arterial gas embolism and decompression illness are time dependent. Time spent for transfer while bypassing open facilities increases risk of poor patient outcomes which are preventable by prompt local treatment.

Unnecessary transfers, sometimes traveling several hundred miles, or in some instances to another state places the medics, patient, and family members at risk of an accident on the drive to the accepting location[3]. Given the significant hospital crowding at most referral centers, any method of decreasing unnecessary admissions and transfers is beneficial. The costs of transfers via EMS can be substantial. The average charge for fixed wing air-ambulance is \$24,507 in 2020, rotary wing ambulance cost is \$18,668[4]. Ground ambulance transfers can cost an average of \$1,277 for ALS, and \$940 for BLS services[5]. Additional problems can arise with private or governmental insurers not covering an out of network treatment leading to unnecessary costs to the patient[6].

CONCLUSIONS/RECOMMENDATIONS

The UHMS recommends that hyperbaric facilities, whether they take call for emergent conditions or not, be available during daytime hours to accept stable patients with emergent conditions to be treated via UHMS recommendations.

REFERENCES

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