PROGRAM REQUIREMENTS FOR ED RESIDENTS
IN
UNDERSEA AND HYPERBARIC MEDICINE

A. Definition and scope of specialty:

The base for the subspecialty of hyperbaric medicine is predicated upon the physiological effects of barometric pressure on the human body. The field includes therapy for disease entities caused by barometric presures lower or higher then normal atmospheric pressure as well as the application of hyperbaric oxygenation for the treatment of specific disease entities.
The scope of this rotation will emphasize safety, mechanics, and clinical aspects of work in the hyperbaric enviornment.

B.) Duration and Scope of Education

1.) Admission to the hyperbaric rotation is contingent upon acceptance/ participation in University Hospitals Emergency Department residency program.
2.) The length of the program holds a twenty-four hour on site requirement over one year. In addition on-call time with the Emergency Department Physician Director covering Hyperbarics will be required. Additional time will be granted on an individual basis.

C.) The rotation will provide a broad overview of Hyperbaric medicine. The educational objectives will include:

1.) The History of Hyperbaric Medicine
2.) The Physiological Effects and Mechanism of Action of Hyperbaric Oxygen
3.) Contraindications to Hyperbaric Therapy
4.) Oxygen Toxicity
5.) Evaluation and Treatment of Carbon Monoxide Poisoning
    A) Psychometric Testing
6.) Non-Pulmonary Barotrauma
7.) Overview of Equipment
    A) ETC Chamber
    B) Seachrist Chamber
    C) Review of multiplace chambers
8) Fire Safety/Disaster/Emergency Decompression
9) The use of theTranscutaneous Monitoring System
10) Overview of Hyperbaric Protocols
11) Overview of the most frequent diseases which can be improved by HBO2
    Actinomycosis
    Air and Gas Embolism
    Burns

Clostridial Myonecrosis
Decompression Sickness
Necrotizing Soft tissue Infection
Osteomyelitis
Radiation Tissue Damage
Osteoradionecrosis
Skin flaps/Grafts

12) Mock trial run of a critically ill patient in a monoplace chamber

A) Ventilator setup
B) IV, Art line, Swan lines, EKG monitoring
C) Management of Chest tubes, drains etc.

13.) The Consulting Hyperbaric Physician

D.) Clinical and Didactic

A) Review of designated reading material located in the Clinical Area
B) Clinical-Hyperbaric Medicine Department Room 1528

E.) Evaluation:

The Emergency Department Program Director, with participation of the Hyperbaric staff, shall evaluate resident performance on an ongoing basis throughout the rotation, and upon completion of the program.