**AREAS TO REVIEW**

**EMERGENCY ROOM**

* Initial assessment and review of enrollment criteria
* Enrolling GCS
* HOB at 30 degrees
* HOBIT eligibility met pending head CT results
* Implantable devices identified and cleared for HBO PRIOR TO ENROLLMENT
* LAR identified
* CT meets enrollment criteria and subject eligible for enrollment
* HBO Team is notified
* LAR consent obtained
* Patient randomized in WebDCU

**ICU RN**

* Removing clothing, jewelry, medical patches, etc. in prep for HBO TX
* Bilateral myringotomies performed
* CSF drainage used as first method for ICP control
* (Monoplace only) Proper IV tubing for monoplace IV pumps
* CXR cleared for HBO TX
* Chest tube(s) for pneumothorax
* Heimlich placed on chest tube(s) and drain to Foley bag or other method
* ETT secure and position noted
* Proper procedure for changing ETT cuff from air to NS
* External fixators or sharp objects padded and secured (especially for monoplace facilities)
* Ensure dressings are not saturated with wound ointments, e.g., petroleum, glycerin or blood. Minimize ointments.
* Blood sugar one hour prior to transport to HBO

**Last 30 minutes prior to transport**

* Notify HBO team of ETA in HBO unit
* Sedate and paralyze subject for transport to HBO
* Extra meds taken for duration of HBO time and transport back to ICU
* Equipment ready for transport, IV’s, ventilator, O2 tank, resuscitation bag, transport monitor
* EVD drained and checked for proper function
* Subdural drains are clamped off
* NG Tube to sputum trap or other device for drainage
* Tube feeding off, flushed and clamped for HBO TX
* Hep-lock all non-essential IV ports. (Monoplace chambers will have limited IV ports)
* HOB at 30 degrees for transport

**TRANSPORT TO HBO**

* ICU and ventilator parameters, BP, HR, ICP etc. verbalized

**HYPERBARIC RN**

* ICU to HBO briefing on subject’s condition, VS, BS, ICP
* RT to HBO briefing on subject’s respiratory / ventilator condition; Vt, RR, PEEP, PIP, Sats, ETCO2, Breath sounds, suctioning, etc.
* Bed checked and under subject for contraband items
* Wrist straps placed
* Monitor leads connected and ensure working
* Replace moist wet linen
* Pressure infuser bags changed to HBO compatible devices
* (Monoplace) ventric controller set up and tested
* NIBP monitoring available?
* (monoplace) JP drains open to air (with exception of subdural drains which should be clamped during HBOT)
* Verify chest tubes with Heimlich valves
* (Monoplace) verify proper IV tubing
* IV Tubing transferred to HBO IV Pumps and verified working properly
* NG and Foley bags setup properly for draining during treatment
* Any HBO safety variants have approved mitigation procedures

**RESPIRATORY THERAPY & HBO VENTILATOR**

* HBO ventilator is properly set up with subject’s parameters including baseline FiO2
* Measuring exhaled tidal volumes
* Verifying tidal volumes / minute ventilation after changing from transport ventilator
* ABG sample taken after 15-20 minutes after placed on HBO ventilator
* Verify ETT placement, breath sounds bilateral and equal
* Suction lungs as needed and above the cuff prior to HBO TX
* Verify ETT cuff is filled with NS and check for proper pressure with minimal leak technique
* Ventilator charting completed noting time placed on HBO ventilator
* (Monoplace) Ohmeda Volume Monitor working and alarms set
* Mechanical spirometer placed inside the chamber on the exhaust side of vent circuit

**HYPERBARIC CHAMBER OPERATOR**

* Chamber set up for proper HOBIT treatment profile
* (Monoplace) Ground strap placed
* Chamber log ready
* Treatment timers set

**SAFETY PAUSE PRIOR TO HBO TX**

* Team together to discuss Safety Pause (HBO MD, ICU RN, study coordinator, HBO RN, RT, HBO tech/operator)
* Chamber operator or designated person conducts Safety Pause
* ICU RN reviews and verifies checklist is complete
* HBO RN reviews and verifies checklist is complete
* RT reviews and verifies checklist is complete
* Study Coordinator reviews and verifies proper treatment profile
* Chamber operator reviews and verifies chamber is ready
* HBO supervising MD reviews and clears subject to be treated in chamber

**DURING HBO TREATMENT**

* Subject is monitored continuously
* Ventilator parameters, including PIP’s, are verbalized, especially during pressure changes
* Ventilator operator is making adjustments during pressure changes
* Communicate with ICU and transport for ETA back to ICU
* Charting is completed and HOBIT data is collected during HBO TX

**AFTER HBO TREATMENT**

* Subject is disconnected and all lines etc. transferred back to normal ICU equipment/monitors
* Pressure infuser bags transferred back to ICU bags
* Monitoring leads connected and transport monitored verified to be working properly
* Subject transferred to transport ventilator and parameters verified along with PIP
* O2-Sats and ETCO2 (if available) verbalized

**TRANSPORT AND BACK TO ICU**

* Verbalized transport monitoring and ventilator ready
* Subject transferred back to ICU bed and debriefing on HBO TX
* Discussion and preparations for next HBO TX
* RT verifies vent settings and ETT cuff pressure with minimal leak technique
* VS, ICP, O2-Sats, and ETCO2 verbalized

**ALL DISCIPLINES REPRESENTED**

* Site PI
* ER Physician
* ER RN’s
* Study Coordinator
* Trauma and Neuro Surgeons
* ICU RN’s
* Respiratory Therapist
* HBO Medical Director
* HBO RN’s
* HBO Technician’s