Undersea and Hyperbaric Medical Society, HBO₂ Safety Committee: Commentary on the current status of IV pumps for monoplace chambers 2-17-2015

Our industry has faced a significant challenge in the last few years finding appropriate infusion pumps and IV tubing sets for monoplace hyperbaric chamber use. Following is an explanation of our current status.

Infusion pumps:

- The Abbot Lifecare 3HB is no longer manufactured or supported. Tubing sets for this pump are no longer made.
- The Hospira Plum A+ Hyperbaric has a FDA 510k for multiplace and monoplace chamber use. However, Hospira has decided to no longer manufacture or sell this pump. Effective June 30, 2014, Hospira no longer provides access to service, support, or IV administration sets for this pump.
- The only option for a monoplace chamber application that we are aware of is the Baxter 6201 Flo-Gard. The Baxter is no longer manufactured, but is available. It is not FDA approved for use with either monoplace or multiplace chambers and hence may not be sold for this purpose. The responsibility for approving the use of the Baxter would reside with the medical and safety directors of the facility. Appended is an article regarding the performance of the Baxter Flo-Gard 6201 when used with the monoplace chamber. The use of the Baxter is also described in pages 133-140 of the Kindwall and Whelan textbook *Hyperbaric Medicine Practice*, 3rd edition; Best Publishing. The upper occlusion alarm must be reset for use against pressures greater than about 2 ATA. If your clinical engineers cannot reset the pump, a company named Hyperbaric Clearinghouse (http://www.hyperbaric-clearinghouse.com/) has supplied these modified infusion pumps in the past.

IV pass-through:

- Argon Medical Devices in Athens, Texas manufactures a disposable Hyperbaric IV Extension Set (part # 041600503A). This set includes: an IV pass-through (with luer lock connectors on each end) that fits into the standard monoplace chamber IV penetrator; an in-line check valve; a 3-way stopcock; a 10cc syringe; and a length of tubing to connect from the inside of the pass-through to the patient.
- Sechrist Industries manufactures a reusable stainless steel pass-through with luer lock connectors on each end (part # HB703). To safety use the Sechrist HB703, you would need to find a suitable in-line check valve. Sterilization of the part would be required after each use.

Sincerely UHMS Safety Committee Jim Bell, Chair

DISCLAIMER

Neither the Undersea and Hyperbaric Medical Society (UHMS) staff nor its members are able to provide medical diagnosis or recommend equipment over the internet. If you have medical concerns about hyperbaric medicine you need to be evaluated by a doctor licensed to practice medicine in your locale, who can provide you professional recommendations for hyperbaric medicine based upon your condition. The responsibility of approving the use of equipment resides with the physician and safety director of the facility. *Information provided on this forum is for general educational purposes only. It is not intended to replace the advice of your own health care practitioner and you should not rely upon it as though it were specific medical advice given to you personally.*