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Title of Abstract

**NORMOCARB® VS HEMOFILTRATION SOLUTION VS PHARMACY
PRODUCED: COSTS AND LIABILITY**

NORMOCARB® VS HEMOFILTRATION SOLUTION VS PHARMACY
PRODUCED: COSTS AND LIABILITY

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Dialysis solutions used for CVVHD can be bicarbonate based (Normocarb® ; Dialysis Solution Inc [DSI], Richmond Hills, Ont) or pharmacy produced or lactate based (Hemofiltration Solution, Deerfield, Il). Data has shown that bicarbonate based solutions result in improved hemodynamics and less clinical lactic acidosis. Pharmacy produced solutions have been used as a substitute for lactate based solutions but are at risk of being more costly due to personnel cost of production and have a relative risk of human error with immediate patient effect and additive (unknown) physician and hospital liability.

Historically this program used lactate based solutions but transitioned to pharmacy made bicarbonate based solutions initially produced by pharmacy but since December 2000 has used Normocarb® exclusively for CVVHD in > 200 patient days on pediatric CVVHD.

Patient cost comparison of each find the cost of Baxter Hemofiltration Solution (\$30.45/bag) vs. pharmacy produced (\$29.38/bag) vs. DSI Normocarb® (27.06/bag). Pharmacy time to prepare each is Baxter Hemofiltration Solution (3 min/bag) vs. pharmacy produced (45min/bag) vs. DSI Normocarb® (5 min/bag). Whereas DSI Normocarb® and Baxter Hemofiltration Solution have industry standard quality control the pharmacy made solution lacks quality control and adds in an unknown but true liability cost to both physicians and hospital.

Comparison of the two industry produced solutions identifies the difference is that DSI Normocarb® is bicarbonate based and calcium free whereas the Baxter Hemofiltration Solution is lactate based. Normocarb® allows for ease of use with citrate anticoagulation or calcium can be added if needed when heparin or no anticoagulation is preferred.

In conclusion, with the availability of DSI Normocarb®, one can use a physiologic bicarbonate based solution with either citrate or heparin anticoagulation that has industry quality assurance maximizing the physiologic benefit to the patient and minimizing physician and hospital liability. Further cost of DSI Normocarb® is marginally better then the Baxter Hemofiltration Solution and certainly better as compared to pharmacy produced.