

Results of single center study of heparin free dialysis with Streamline® blood tubing for inpatient hemodialysis¹

A Prospective Study of Routine Heparin-Free Hemodialysis (HFD) with Streamline Bloodline (SL) in a Large Tertiary Acute Care Inpatient Practice

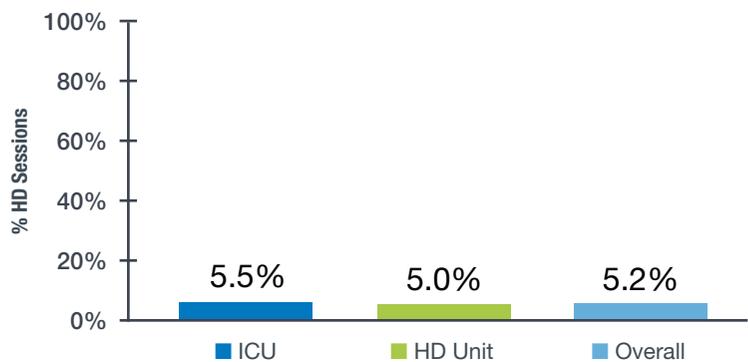
Abstract published by the Journal of the American Society of Nephrology, 2015.

Safadi S, Ryan MA, Severson AL, et al. – In this prospective study of 374 inpatients at the Mayo Clinic in Rochester, MN, the authors evaluated a heparin free dialysis protocol using Streamline bloodlines and concluded the protocol to be feasible and safe with a low risk of clotting events (CE).

“ Extracorporeal circuit (EC) anticoagulation (AC) with heparin was a key advancement in hemodialysis (HD). However, AC in patients at risk of bleeding remains a frequently encountered problem.”

- **Safadi S, Ryan MA, Severson AL, et al. Abstract in JASN, 2015.**

Low rate of CE seen in the ICU and HD Floor Unit



Overall clotting rate of 5.2% over 1,200 hemodialysis treatments.

Determinants for CE and CE impact on Kt/V

Determinants for clotting events: HD catheters (OR=2.8, p<0.01), transfusions (OR=2.3, p=0.05), systemic anticoagulation within 7 days (OR=0.2, p<0.01), and antiplatelets within 7 days (OR=0.4, p<0.01). Clotting events were associated with a lower dose delivery (Kt/V diff-0.39, p<0.01).

Study Design: In this prospective study, the authors followed acute care inpatients requiring hemodialysis without anticoagulation of the blood circuit and evaluated the CE rate, CE impact on dialysis dose, and associated risk factors for CEs. Some patients were prescribed anticoagulation for non-hemodialysis indications. All treatments used the Streamline bloodline and the Fresenius® 2008® hemodialysis machine. CEs were defined as an interruption of the hemodialysis session, loss of the hemodialysis circuit, or an inability to return blood.

Important Information: The Streamline blood tubing sets are prescription devices and, like all medical devices, involve some risks. Failure to observe all warnings and precautions noted in the Streamline Instructions for Use may result in serious complications, including blood loss due to clotting or air entering the bloodstream. Each patient’s care plan should be determined by the physician, based on the individual facts and circumstances of the patient. The use of anticoagulation is at the discretion of the prescribing physician.

Funding: Medisystems, a NxStage Company

References:

1. Safadi, S, Ryan M, Severson, A, et al. A Prospective Study of Routine Heparin-Free Hemodialysis (HFD) with Streamline® Bloodlines (SL) in a Large Tertiary Acute Care Inpatient Practice. Abstract Supplement of the Journal of the American Society of Nephrology, 2015.