Learning from serious incidents related to dialysis

January 2010

Haemodialysis dialysate lines incorrectly configured for local requirements.

Dialysis machines are supplied from Europe with the dialysate connectors configured as red for supply and blue for return and require to be changed during commissioning to correspond with local policy (majority of UK units) to Blue for supply and Red for return.

A patient on home dialysis with a new machine received treatment over a period of six weeks with the dialysate connectors configured for Europe. Subsequent checking revealed an additional two machines within the service with similarly configured dialysate lines. European configured dialysate lines in all 3 machines resulted in parallel rather than counter-current flow of dialysate and blood.

The potential consequences are significantly reduced quality of dialysis treatment (up to 20% reduction in efficiency)

Action:

- Dialysis units are advised to check all machines currently in service to ensure dialysate lines / colour coded Hansen connectors are correctly configured as per local policy.

- As colour coding may vary between units / regions the failsafe way to identify the dialysate lines / correct configuration is to note that the dialysate supply line is always connected to the venous side of the dialyser. For example, on the Fresenius 5008 machine the dialysate supply line is always the one with the sampling port and this line is always connected to the venous side of the dialyser. The supply line is always positioned to the back of the shunt interlock (towards rear of machine).

Please submit comments, solutions, and personal experience to:

Dr. Paul Rylance, Renal Unit, New Cross Hospital, Wolverhampton, WV10 0QP
or email to: Paul.Rylance@rwh-tr.nhs.uk