Severe blood loss in haemodialysis patients from dialysis line disconnection and femoral catheter removal

Dialysis line disconnection

The Patient Safety Committee has been made aware of 3 separate instances in different dialysis units of line disconnections during haemodialysis treatment in the last couple of months, with consequent significant blood loss and suspected air embolism. All patients survived.

We recommend that connections and lines are kept in full view of dialysis staff during dialysis, if necessary secured with tape, and that any alarm should prompt visual inspection of these. It is customary in most units to place the dialysis machine on the same side as patient access. Local dialysis nursing supervision guidelines should of course be adhered to, though these vary from unit to unit. Some units have double-checking of line connections by 2 nurses included in their protocols for starting dialysis.

Action

- The Committee wishes to know if your unit or satellites have been affected by similar incidents. Please include information about type of line and catheter, manufacturer and batch number. We advise that these incidents are reported to the manufacturer and to the MHRA. In such cases, the dialysis lines should be retained for return to the manufacturer for full inspection. A fault in the haemodialysis catheter should also be considered, and it should be inspected, and also reported to the manufacturer.

Fatal blood loss following a femoral catheter removal

The Committee has also been alerted to a patient death after dialysis catheter removal, due to haemorrhage. This has been highlighted previously in an NPSA alert in 2010, and thus we are concerned that this may not be an isolated incident. We would like to collect information on similar life-threatening or fatal haemorrhage related to planned or inadvertent line removal. We are interested to understand how commonly this complication occurs, and what guidance is in place in individual units to mitigate against it. Should we confirm a need, we will undertake a survey of renal units in the hope of producing guidance in the future.

Action

- Please provide details of any other occurrences of bleeding after femoral catheter removal to us at patientsafety@renal.org.

Please submit comments, solutions, and personal experience to:

Dr. Katy Jones, RA-BRS Patient Safety lead by email to: patientsafety@renal.org