Risk of air embolism from haemodialysis catheters as a result of inadequate closure by replacement clamps.

Most renal units in the UK rely on tunneled cuffed venous catheters (TCVC) for haemodialysis access in a significant proportion of our patients.

In one unit, over the last few months, clamps have broken on at least one lumen on 4 patients' TCVCs. This was resolved by using a commercially available clamp to replace the broken clamp.

However, it was recently noticed that these clamps were not providing complete closure of the line. If the cap came off the line there would be nothing to prevent air getting into the line, causing air embolism.

Upon further investigation it transpires that these so called subclaivian clamps are designed for PD catheters and not haemodialysis catheters despite being labeled as such. The manufacturer has been asked to comment, and their reply is awaited.

These cases have highlighted several issues:

1. The clamps and luer-lock attachments on TCVCs may become broken after repeated use. The range of "age" of the Permcaths involved was 6 months to 19 months

2. Replacement clamps may not be completely reliable and extra vigilance is required to ensure that the clamps used are adequate

3. Repair kits are available for some catheters which can allow replacement clamp and luer-lock fittings to be added without having the TCVC replaced.

Please submit comments, solutions, and personal experience to:

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