

Outcome of Tunnelled Central Venous Haemodialysis Catheters Inserted by Radiologists

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Abstract

Radiologists have only recently been involved in the percutaneous placement of tunnelled central venous haemodialysis catheters. We report our initial experience with our first 60 catheters. All catheters were successfully inserted. Immediate complications encountered included puncture site haemorrhage in 3 patients (5%) and puncture of the left brachiocephalic vein in 1 patient (1.7%). These were managed conservatively without any clinical sequelae. About 80% of the catheters were uncomplicated and removed electively. Slightly more than 80% of the catheters were in place for more than 30 days.

Infection and blocked catheters were the most common short-term complications. Ten catheters (17%) were infected resulting in premature removal of 9. There was 1 death from presumed line sepsis. Mean duration before the onset of infection was 53 days; the rate of infection was 0.28 episodes per 100 catheter days. Five catheters (8%) were blocked or had poor flow. The mean duration before the onset of blockage was 39 days and the rate of blockage was 0.14 episodes per 100 catheter days. A higher proportion of catheters inserted from the left encountered complications.

In conclusion, percutaneous insertion of tunnelled haemodialysis catheters by radiologists is safe and effective. The right internal jugular vein should be the preferred access site. Precautions should be taken to avoid infectious complications given the high rate of catheter removal amongst infected catheters.

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