
Abstract:

BACKGROUND: Vascular access for haemodialysis is achieved by tunnelled central venous catheter (CVC) in at least 23% of prevalent patients in the UK, Canada and the USA. Use of CVCs is associated with an increased incidence of venous stenosis that can progressively limit future vascular access routes. Lack of conventional venous access routes mandates the use of alternative strategies such as the translumbar approach.

METHODS: We retrospectively analysed patients at our centre requiring translumbar inferior vena caval CVCs (TesioCath) for haemodialysis in the period 1999-2008. Written and electronic records capturing dialysis adequacy and complications, hospital admissions and laboratory data were examined.

RESULTS: Thirty-nine pairs of translumbar CVCs were inserted in 26 patients with 15 864 catheter days follow-up, mean patient age 61.9 +/- 12.1 years, 31% diabetic, 15% with ischaemic heart disease. All insertions were successful. Insertion of one CVC was associated with a self-limiting retroperitoneal haematoma. No patients died of a catheter-related cause or through lack of vascular access. Cumulative assisted primary catheter site patency was 81% at 6 months and 73% at 1 year (median 18.5 months). Good dialysis adequacy was
achieved throughout (mean single-pool Kt/V 1.5 +/- 0.4). The incidence of access-related infection was 2.84/1000 catheter days (exit site infection rate 2.02/1000 catheter days; catheter-related bacteraemia rate 0.82/1000 catheter days). Catheter dysfunction (need for thrombolytic infusion or catheter change) led to 0.88 admissions per 1000 catheter days.

CONCLUSION: Translumbar inferior vena caval CVCs can offer relatively safe and effective long-term haemodialysis access in patients with no other options.