
Abstract:
Midline catheters have many advantages for chronically ill patients needing up to six weeks intravenous therapy and medications, and when inserted in a sterile environment and correctly monitored and maintained, have a significantly lower association of infection and thrombus than previously suggested. Furthermore, there is a reduction in central collateral vessel formation from incursions into the superior vena cava, associated with peripherally inserted central catheters. Midline use was examined in a cystic fibrosis control group. Lines were checked daily until removal. All midline catheter tips were sent for culture on removal and data from 42 midlines placed in 2006 were retrieved from the hospital scientist for analysis. Twenty-seven inpatients with cystic fibrosis were identified and informed of the trial and possible risks of midline use. Outcome variables included infection and thrombus rates. On conclusion of the trial, data demonstrated both zero infection and thrombus rates in the study patient population. Midline catheters were monitored for a further 12 months following conclusion of the trial and infection rates continued to be below 1% and thrombus rates lower than 2%. In the specified group, the parameters of use for midlines fit with international cystic fibrosis intravenous antibiotic protocols currently adhered to. The study has begun to generate evidence to inform clinical practice, improve patient outcomes and supports the role of the specialist nurse in implementing midlines for cystic fibrosis patients.

More...

- Variation in use and outcomes related to midline catheters
- Safety of midline catheters for intravenous therapy
- The clinical performance of midline catheters