

THE USE OF PERIPHERALLY INSERTED CENTRAL CATHETERS (PICC) FOR PEOPLE WHO INJECT DRUGS (PWIDS) FOR OUTPATIENT ANTIBIOTIC THERAPY (OPAT): A REVIEW OF THE LITERATURE.

Authors:

Wilson C¹, Peter E¹, White B¹

¹Infectious Diseases Department, Queen Elizabeth University Hospital, Glasgow

Background: PWIDs are at risk of invasive infections requiring prolonged courses of intravenous antibiotics. Many PWIDs find remaining in hospital challenging. OPAT is increasingly available but PWIDs tend to be excluded, in part due to concerns of PICC tampering. Alternative treatment options lack evidence and there is increasing demand on hospital services. There is a need for equitable care for this cohort. We conducted a literature review to assess current opinions, practice and evidence for the safety and acceptability of the use of PICCs in OPAT for PWIDs.

Methods: Articles in English up to September 2022 were identified from Medline/Pubmed using combinations of search terms; 'Outpatient antimicrobial therapy', 'peripherally inserted venous(/central) catheter', 'intravenous drug use', 'people who inject drugs'. 549 unique titles and abstracts were screened, identifying 37 articles which were reviewed in full. A manual search of references revealed 30 further articles which were reviewed in full.

Results: Opinion pieces, surveys, observational and randomised studies were collated. The majority of data are from the USA, Canada and Australia. There are no guidelines to support clinicians providing OPAT for PWIDs. Unselected cohorts are more likely to have line complications with associated mortality. 14 observational trials with selected cohorts and 1 RCT conclude that OPAT can be provided safely with a PICC for PWIDs. OPAT success ranged from 78% – 100%. In two case control studies, there was no significant difference in OPAT failure, line complications, readmission or death for PWIDs vs non-PWIDs. However, the definition of 'OPAT destination' varied widely from the patient's home to inpatient addiction facilities and 'OPAT success' varied from clinical improvement to perfect adherence.

Conclusions: Available data shows OPAT can be provided for PWIDs with a PICC in highly selected cohorts. Crucially, OPAT services vary widely and clinicians should be aware of these nuances when designing services.

Disclosure of Interest Statement: *The conference collaborators recognise the considerable contribution that industry partners make to professional and research activities. We also recognise the need for transparency of disclosure of potential conflicts of interest by acknowledging these relationships in publications and presentations.*

I confirm all authors (Catherine Wilson, Beth White and Erica Peters) have no disclosures.