THE MOBILISE STUDY: UTILISATION OF AMBULATORY PUMPS AND ANTIBIOTIC INFUSION IN THE INPATIENT SETTING TO ADMINISTER ANTIBiotic THERAPY

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Introduction
Outpatient parenteral antimicrobial therapy has become a global treatment modality. In the inpatient setting, antibiotics are generally administered via bedside pumps with multiple daily dosing. Utilisation of an ambulatory care model in the inpatient setting for antibiotic administration may reap the benefits described in the outpatient setting.

Methods
Patients receiving a peripherally inserted central catheter for antibiotic administration were screened to see if they met predefined study criteria. This included the need for administration of an antibiotic that was considered stable (with or without buffering) for administration by either a 12- or 24-hour infusion at room temperature. Mobility with or without specified aids was also required. The patients were randomised into one of two groups: 1. standard pump and intermittent antibiotic dosing and 2. antibiotic infusion via an ambulatory pump. The patients wore an accelerometer on their ankle. Nursing and patient satisfaction surveys were carried out at the time of patient exit from the study.

Results
Forty patients met the study criteria for enrolment. One hundred and four days of accelerometer recordings were available for analysis. The median time of daily patient activity was 45 minutes in the standard arm and 62 minutes in the ambulatory pump and antibiotic infusion arm (p=.108). Activities of daily living were rated as “extremely easy” more often in the ambulatory pump and antibiotic infusion arm.

Conclusion
Utilisation of an ambulatory pump with an antibiotic infusion did not lead to increased patient activity. Nursing and patient satisfaction with utilisation was however high.

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