Despite the numerous benefits of outpatient parenteral antimicrobial therapy (OPAT), appreciable risks of drug-related problems (DRPs) exist. No studies to date comprehensively assess DRPs in this population” Hale et al (2017).

Abstract:

BACKGROUND: Despite the numerous benefits of outpatient parenteral antimicrobial therapy (OPAT), appreciable risks of drug-related problems (DRPs) exist. No studies to date comprehensively assess DRPs in this population.

OBJECTIVES: Objectives of this study were to (1) characterize the frequency and types of DRPs experienced by patients discharged on OPAT and (2) determine the fraction of adverse drug reactions (ADRs) resulting in hospital readmission or emergency department (ED) presentation and changes in therapy.

METHODS: This was a retrospective chart analysis evaluating consecutive adult patients discharged on OPAT between May 2015 and October 2015. Patients were assessed for the presence of DRPs until the cessation of antimicrobial treatment, including oral step-down
therapy. The outcome of each ADR was recorded, including those resulting in hospital readmissions, presentation to the ED, or changes in antimicrobials.

RESULTS: Among 144 patients discharged on OPAT, 199 DRPs occurred in 91 (63.2%) patients. Harm and potential impaired efficacy occurred in 76.9% and 23.1%, respectively. The ADRs comprised 59% of DRPs, occurring in 44.4% of patients. The second most common DRP type was drug interactions (DIs), accounting for 22.6% of DRPs. Rifampin, fluoroquinolones, and daptomycin had the highest frequencies of preventable DRPs in the form of DIs, whereas cephalosporins had the fewest DRPs. Approximately 26% of ADRs caused changes in therapy and 9% resulted in hospital readmission or ED utilization.

CONCLUSION: DRPs with the potential to cause patient harm or impair treatment efficacy often occur with OPAT, most commonly ADRs and DIs. Enhanced monitoring and transitions of care management may reduce the incidence of these DRPs.

Full Text
Reference:


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