

To better monitor patients on outpatient parenteral antimicrobial therapy (OPAT), we need an improved understanding of risk factors for and timing of OPAT-associated adverse drug events (ADEs)” Keller et al (2017).

Abstract:

BACKGROUND: To better monitor patients on outpatient parenteral antimicrobial therapy (OPAT), we need an improved understanding of risk factors for and timing of OPAT-associated adverse drug events (ADEs).

METHODS: We undertook an analysis of a prospective cohort of patients discharged from two academic medical centers on OPAT. Patients underwent chart abstraction and a telephone survey. Multivariable analyses estimated adjusted incident rate ratios (aIRR) between clinical and demographic risk factors and clinician-determined clinically significant ADEs. Descriptive data were used to present patient-reported ADEs.

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RESULTS: Of 339 patients enrolled in the study, 18.0% experienced an ADE (N=65) of which 49 were significant (14.5%, 2.24/1000 home-OPAT days). Patients with longer courses of therapy had lower rates of ADEs compared with patients treated for 0-13 days (14-27 days: aIRR: 0.44, 95% CI: 0.20-0.99; at least 28 days: aIRR: 0.11, 95% CI: 0.056-0.21). Risk factors for ADEs included female gender and receiving daptomycin or vancomycin, while treatment for uncomplicated bacteremia and empiric treatment were associated with lower rates of ADEs.

CONCLUSIONS: OPAT-related ADEs were common, and often occurred within 2 weeks of hospital discharge. Patients on OPAT should be monitored more closely for ADEs including clinical assessment and laboratory monitoring, especially within the first weeks after hospital discharge and particularly among women and patients receiving vancomycin.



Reference:

Keller, S.C., Williams, D., Gavgani, M., Hirsch, D., Adamovich, J., Hohl, D., Gurses, A.P. and Cosgrove, S.E. (2017) Rates of and Risk Factors for Adverse Drug Events in Outpatient Parenteral Antimicrobial Therapy. *Clinical Infectious Diseases*. August 17th. .

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