ORAL ABSTRACTS

1298. Predictors of Hospital Readmission in Patients Receiving Outpatient Parenteral Antimicrobial Therapy (OPAT)

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Background. OPAT is increasingly utilized; however, hospital readmissions during OPAT are common and few studies have been conducted to identify risk factors for these readmissions.

Methods. Retrospective, observational, cohort study of adults discharged from a U.S. academic medical center between 1/1/12 – 8/1/13 who received OPAT via a peripherally inserted central catheter. Cystic fibrosis patients were excluded. The primary endpoint of the study was readmission during receipt of OPAT. Chi-squared, Student's t-test, and Mann-Whitney U were used for univariate analysis. Multivariate logistic regression was utilized to determine independent factors associated with readmission.

Results. 216 patients included with a median age of 56 years & 54% male. Common comorbidities of the total cohort included diabetes (33%) & moderate/severe kidney disease (26%). Common infections treated with OPAT included bone/joint (32%), genital/urinary tract (16%), endocarditis (14%), CNS (9.7%), pneumonia (9.7%). 20% of patients were readmitted. Readmission reasons included: infection recurrence/progression (33%), adverse drug reaction (24%), line-associated issue (16%), or non-OPAT-related (27%). Factors predictive of hospital readmission are noted in the table.

Factors associated with hospital readmission in patients receiving outpatient antimicrobial therapy

Risk Factor	Readmitted N=43 n (%)	Not Readmitted N=173 n (%)	Univariate Analysis p-value	Multivariate Analysis OR (95% CI)
Primary care provider	10 (23.3)	72 (41.6)	0.026	0.296 (0.117-0.75)
Malignant lymphoma	3 (7)	1 (0.6)	0.05	23.395 (2.102-260.43)
Previous admission	30 (69.8)	84 (48.6)	0.013	2.594 (1.161-5.795)
Bone and joint infection	23 (53.5)	46 (26.6)	0.001	NS
Vancomycin	15 (34.9)	30 (17.3)	0.011	NS
Daptomycin	5 (11.6)	5 (2.9)	0.015	NS
Discharge to skilled nursing facility	9 (20.9)	66 (38.2)	0.034	NS
Discharge to subacute rehab	6 (14)	7 (4)	0.014	NS

Conclusion. Having a primary care provider was protective for hospital readmission, whereas having malignant lymphoma or an admission in the prior 12 months were independent risk factors for readmission in patients receiving OPAT. To decrease readmissions, primary care providers should be assigned to patients receiving OPAT.

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