Review of Patient Characteristics and Outcomes of Outpatient Parenteral Antimicrobial Therapy in UHL

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Background

Outpatient parenteral antimicrobial therapy (OPAT) is a safe and effective alternative to hospitalization for many patients who require prolonged intravenous antibiotic therapy(1). Completion of therapy through OPAT following an initial period of inpatient management may support more efficient use of hospital resources and reduce the hospital associated adverse events(2).

Objective

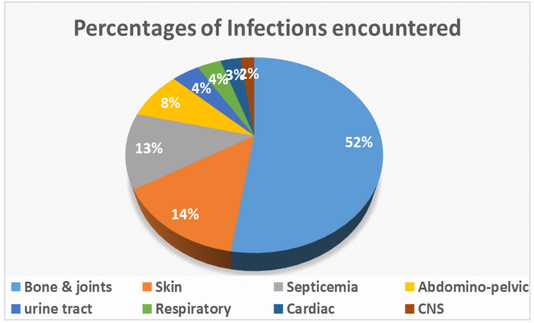
The objective of this study was to describe the OPAT experience at UHL in 2019, including patient characteristics, variety of infections involved, microbial resistant pattern and clinical efficacy.

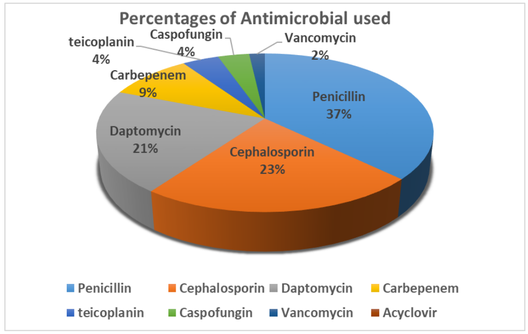
Methods and Materials

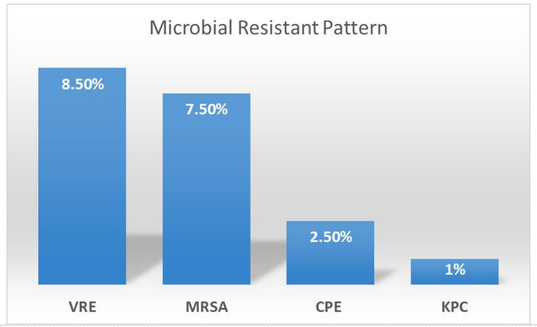
Data was collected from OPAT patients enrolled in January 2019 to December 2019 regarding their age, gender, referring specialties, diagnoses, causative organisms, microbial resistant, chosen antibiotics, expected treatment durations, SOPAT versus HOPAT, outcomes for OPAT, switch to oral treatment, and number of bed days saved. Data analysis was done through SPSS 23.0.

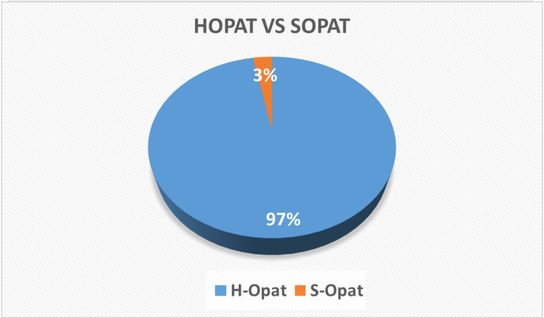
Results

During the one year period from January to December 2019, 199 patients were referred for OPAT assessment and 131 were found to be suitable for OPAT. Mean age was 60.21+16.47 SD (range 17-91years). Of these, 61 originated from medical and 70 originated from surgical admissions. Total bed days saved in 2019 were 2964. OPAT was successfully completed in 77.6% of patients & 20.6 % required an oral switch afterwards.









Almost 22.4 % of patient couldn't complete OPAT program due to a combination of factors including recurrence of infection, side effects to antibiotic therapy and additional factors. Average expected OPAT duration was 3.35 weeks (range 1-6 weeks) and in 14.1% treatment duration was extended beyond initial planned duration. Health care provided OPAT cases were 97% versus only 3 % of Self OPAT cases. Of note wheel chair transport was required in 57.2% of the OPAT patients, highlighting the ongoing requirement for a ground-floor clinic with wheelchair access, outside the current ID department.

Discussion

As we can see from above mentioned results, various types of infections either medical or surgical have been managed effectively in outpatients setting with high success rate. This management plan allowed early discharge from hospital for clinically stable patients saving a large number of hospital bed days and their relevant cost(3). Furthermore, appropriate antibiotics selected according to sensitivities and duration decided according to clinical response and site of infection involved(4). In addition, this approach proven to be safe, cost effective with high level of patient has acceptance and satisfaction. There is additional benefit of reduced exposure and risk of hospital acquired infection. In this study ratio of SOPAT was quite low. Self-administration of antibiotics is safe and can further help in reduction of health care cost with fewer nursing and clinic visits.

Conclusions

OPAT appears to be a safe, effective and practical approach for long term antimicrobial therapy with benefits of efficient bed utilization, reduction in health care costs and provision of appropriate antimicrobial therapy with a particular emphasis on anti-microbial stewardship. However, rates of SOPAT are low; a further move from HOPAT to SOPAT for suitable patients will further help with the sparing of CIT resources and in certain cases, patient satisfaction.

Contact

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