

Outpatient Parenteral Antibiotic Therapy (OPAT) During the COVID 19 Pandemic: A Dedicated Team Effort To Ensure Appropriate Follow-Up

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Background

- The Infectious Diseases Society of America defines OPAT as “the administration of parenteral antimicrobial therapy in at least 2 doses on different days without intervening hospitalization”.
- The COVID pandemic necessitated shorter hospital stays with close follow-up by the Houston VA OPAT Team composed of two Infectious Disease attendings, a clinical pharmacist and a physician assistant.
- For providers, OPAT shortened lengths of stay, potentially reduced costs, and possibly reduced nosocomial infections
- For patients, OPAT was convenient, could be used for almost any antibiotic and regular skilled clinical assessments occurred in their homes.

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Results

- Review of OPAT cases illustrated the frequent isolates (gram positive non-urine), frequent diagnoses (**hardware infections, osteomyelitis, diabetic foot wounds**, etc.), **drug toxicities** and **line malfunctions**.
- These included asymptomatic CK elevations in a patient with Methicillin Resistant *Staph Aureus*(MRSA), cefazolin induced dyshidrotic eczema, progressive dry gangrene in a diabetic with osteomyelitis and a dislodged line.



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Methods

- The team used face-to face, VA Video Connect and telephone visits for follow-up.
- **Digital photographs** enhanced patient/provider and provider/provider communication.
- A weekly OPAT **Team Huddle** was added to the process to review noted safety concerns, patient issues, tracked issues(labs, adverse reactions), potential planned discharges on OPAT and have collaborative OPAT Team input in addition to weekly visits. Patients were evaluated pre-discharge for OPAT safety/feasibility.
- **Antibiograms** guided antibiotic selection. Using culture and sensitivity data, antibiotic susceptibility or resistance was determined for particular pathogens based on Houston VA's own data.
- Organism susceptibility is classified as $\geq 90\%$, 80 – 89% and $< 79\%$ with gram positive (non-urine) isolates being the most common.

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Discussion

- Successful OPAT must be well-coordinated with attention to detail by multiple stakeholders (a clinical pharmacist, a physician assistant, patients and caregivers, infusion companies, home health providers) using multiple forms of communication.
- A Physician Assistant is well positioned to be the clinician that provides coordination of care, is able to make clinical decisions, particularly in complex patients with multiple comorbidities, and communicate with all stakeholders.

References

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