Dalbavancin Utilization in Rural Healthcare Setting: A Single Center Three Years' Experience

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Background:

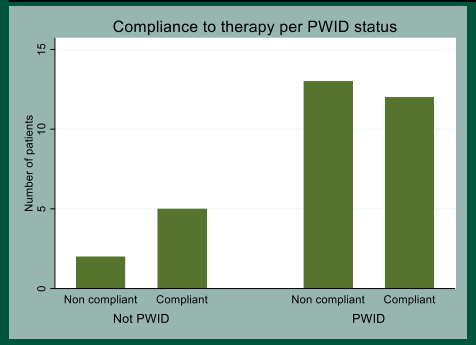
Dalbavancin is a second generation lipoglycopeptide, approved by the Food and Drug Administration (FDA) for treatment of acute bacterial skin and skin structure infections (ABSSSI). The weekly dosing of Dalbavancin has encouraged its off-label use to treat other severe infections, especially in patients deemed to be poor candidates for intravenous antimicrobial therapy through a long-term intravenous catheter.

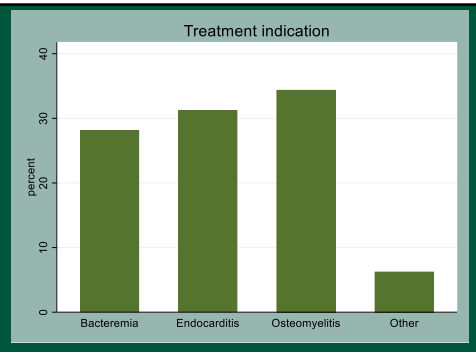
Methods

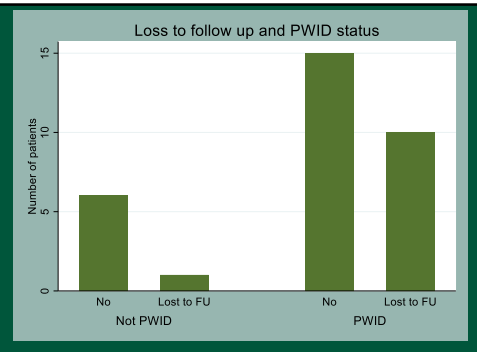
Single center retrospective chart review of 33 patients who were planned to receive Dalbavancin between March 2015 and March 2019 at Dartmouth-Hitchcock medical center in Lebanon, New Hampshire.
We reviewed demographics, indications, microbiological culture results, residence distance from designated infusion center, intravenous drug use status and compliance data.

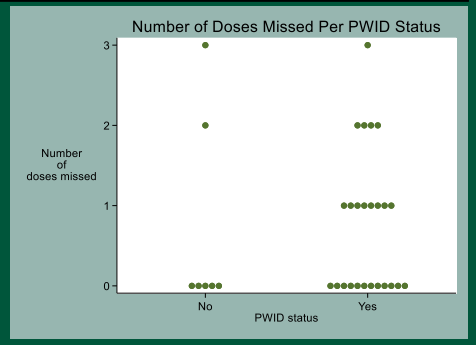
Results

Dalbavancin therapy was planned for 25/33 patients (75.75%) specifically due to safety concerns around use of a peripherally inserted central catheter (PICC) in Persons Who Inject Drugs (PWID). All 25 patients (75.75%) were actively injecting at the time of the infection with 16/33 patients (48.48%) receiving or newly enrolled in medication assisted treatment. The planned duration of therapy was not completed in 15/33 patients (45.45%) and 13 of them were PWID. 11/33 patients (33.3%) were lost to follow up. Additionally, 6 patients experienced insurance coverage issues or difficulty having peripheral access placed. The average driving distance between home and infusion suite was 47 miles.
Methicillin Resistant *Staphylococcus aureus* (19/33) and Methicillin Susceptible *Staphylococcus aureus* (8/33) were the most commonly treated organisms and the average pathogen-directed therapy duration prior to starting Dalbavancin was 15 days.









Conclusion:

- Bacteremia, Endocarditis and Osteomyelitis were the leading indications for treatment.
- MRSA and MSSA were the most commonly treated organisms.
- Loss to follow up (before or after receiving all infusions) and non-compliance rates (missing at least one infusion) were high in PWID which raises serious concerns about the viability of Dalbavancin as an option for this particular group in a rural healthcare setting.
- More data is needed to determine the reasons behind high non-compliance rates in the PWID population.