LIVE VIRTUAL SYMPOSIUM
JULY 8-12, 2020

Pre 2 – Bugs and Drugs - Antibiotic Review - E. Monee' Reed

Q – Does metronidazole (vaginal insertion) for treatment of BV have the same s/e as the oral metronidazole. (mainly in relation to the alcohol use)
A – *Not typically because vaginal metronidazole does not have the same degree of systemic absorption as other forms.*

Q – In Case study 1 you mentioned there is strep resistance to something....Doxy or Zithromax.....which was it? I couldn't hear it due to noise on my end.
A – *There is increasing resistance to Azithromycin. In some settings, as much as 25% of Streptococcus pneumoniae resistance has been reported.*

Q – What abx would be the most appropriate for an elderly female with a UTI who has an eGFR of 36 and is allergic to PCN? Urine culture with no issues with susceptibility.
A – *This is assuming it is a "real UTI". Asymptomatic bacteriuria should not be treated; however, if an elderly woman has a positive UA and localized symptoms to implicate a UTI, then they should be treated (refer to the most recent IDSA guidelines). It also depends on her co-morbid conditions. First line treatment is Bactrim or Nitrofurantoin. Theoretically, she has enough renal function to support both; however, renal disease and a combination of heart failure that is medically managed can lead to negative consequences if prescribed with Bactrim (as well has other co-morbid conditions such as DM). The 2019 Beers Criteria suggest that Nitrofurantoin can be used with a CrCl 30 ml/min or greater. There is also Fosfomycin, but it can be rough on the stomach. I would avoid fluoroquinolones in the elderly population, and they are not implicated in uncomplicated UTIs. To sum it up, Bactrim or Nitrofurantoin would be appropriate for a short period of time. Based on any underlying co-morbid conditions with associated polypharmacy would further dictate which one I choose.*

Q – Can you discuss use of azithromycin and COVID-19? This is assuming no known concurrent bacterial infection.
A – *Honestly, there is not much to discuss. It is not being used for the treatment of COVID unless there is a concern for some sort of underlying bacterial infection. The only probable indication of success in the treatment of COVID was related to combination use with Hydroxychloroquine. The literature has not been supportive of both as an effective means for*

treatment of severe COVID. Other modalities are currently being used such as dexamethasone, convalescent plasma, Remdesivir (antiviral), and tocilizumab (IL-6 inhibitor).

Q – I didn't see zyvox in lecture, can you talk on that real fast pointers?
A – *Zyvox (Linezolid) is a oxazolidinone antibiotic. It works by inhibiting protein synthesis. It is indicated for gram positive organisms such as Staphylococcus aureus including MRSA and VRE. It has no gram negative coverage. It is used to treat pneumonia and skin infections. Typical adult dosing is 600 mg PO or IV every 12 hours. Pediatric dosing is 10 ml/kg PO or IV every 8 hours. This drug has been reported as causing myelosuppression. If you start having unexplained changes in your CBC, then it may be a result of this medication. Previously, there was literature discussing its superiority to Vancomycin in the treatment of MRSA infections; however, that really never took hold in the guidelines. Vancomycin remains the gold standard for MRSA infections. There is plenty of literature to support Vancomycin use and success. Secondly, the myelosuppression is likely another reason plus it is expensive. Avoid using this medication with someone on MOA inhibitors.*

Q – In the pediatric population we often prescribe amoxicillin or cephalexin BID rather than every 8 hours. What criteria should we consider in making determination whether to prescribe TID rather than BID?
A – *This was a general talking point related to the medication. Ideally, you want to prescribe based on the condition and supporting guidelines.*