

Session Summary for 15 May, 2018

Didactic: Antifungal Stewardship, Erica Stohs, MD.

* Goal: Optimize antifungals to achieve the best outcomes while minimizing adverse events and limiting selection pressures that drive resistance. 1,2
* Cost savings:
  + Daily posaconazole $500 v daily voriconazole $200
  + Daily Micafungin $62 v fluconazole $4
* Candida: Normal colonizer of oropharynx, GI tract, and vagina.
  + Overgrowth can lead to symptoms.
  + Can develop invasive candidiasis in patients with RF.
* *C. albicans* and *C. glabrata* are the most common.3
* RF for invasive candida:
  + Antibiotics, steroids, age, malignancy, PPI use, TPN, recent surgery, CKD/dialysis, malnutrition, prolonged ICU stay, mechanical ventilation.4
* Candidemia, candida bloodstream infection.3
  + It is treated upfront with micafungin 100 mg IV.
  + Remove their central line.
  + If the patient has no RF for resistance to azoles and is not critically ill then you can consider fluconazole 800 mg IV load followed by 400 mg IV or PO daily.
  + Once blood cultures are clear and you have sensitivities and a species you can consider change to oral fluconazole.
  + All patients with candidemia should have ophthalmology exam.
  + Recommended duration is 2 weeks after blood culture clearance and source control.
  + Remove ETT and foley catheter on case by case basis; not necessarily required.
* *C auris,* a new threat. Risks include recent surgery, diabetes, or broad spectrum antibiotic use. Also, recent nursing home stay and presents of CVC. 30-60% mortality. Echinocandins are still first line.5

References:

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2. Ananda-Rajah MR, Slavin MA, Thursky KT. The case for antifungal stewardship. *Curr Opin Infect Dis*. 2012;25(1):107-115. doi:10.1097/QCO.0b013e32834e0680

3. Pappas PG, Kauffman CA, Andes DR, et al. Clinical Practice Guideline for the Management of Candidiasis: 2016 Update by the Infectious Diseases Society of America. *Clin Infect Dis*. 2016;62(4):e1-e50. doi:10.1093/cid/civ933

4. Pfaller MA, Diekema DJ. Epidemiology of invasive candidiasis: A persistent public health problem. *Clin Microbiol Rev*. 2007;20(1):133-163. doi:10.1128/CMR.00029-06

5. CDC. Candida auris.

https://www.cdc.gov/fungal/candida-auris/

https://www.cdc.gov/drugresistance/c-auris.html