

Category : **Sepsis/septic shock: management**

## **A76 - Changing the treatment for clostridium difficile infection**

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### **Introduction:**

Oral vancomycin(V) is an antibiotic(A) of choice for *Clostridium difficile* infection(CDI) since 2017[1]. The aim of study - to compare clinical and treatment aspects of CDI in 2014–2015 and 2019–2020.

### **Methods:**

A retrospective observational study was carried out in Intensive Care Clinic of LUHS. Data of Department of Infection Control records of diarrhetic patients(pt) with positive CD toxins A/B in stools were used, including: risk factors(age  $\geq 65$  years(yr), *Charlson Comorbidity Index*(CCI) $>5$ ), initial treatment(IT)(V/metronidazole), duration of IT, route of administration(adm) (oral/ intravenous(IV), rate(R) of recurrent(RC) CDI, admission to Intensive Care Unit(ICU) due to CDI and in-hospital mortality(IHM). Level of statistic significance –  $p < 0,05$ .

### **Results:**

A total number of 100 pt in 2014–2015 and 71 pt in 2019–2020 were included. 54%(n=54) of pt  $\geq 65$ yr old in 2014–2015 and 53.5%(n=38) in 2019–2020,  $p \geq 0.05$ . CCI $>5$  was found in 48%(n=48) of pt in 2014–2015, and in 54.9%(n=39) in 2019–2020,  $p \geq 0.05$ . IT with V was given to 9%(n=9) of pt in 2014–2015 and to 39.4%(n=28) of pt in 2019–2020,  $p < 0.05$ . A median duration of IT was 10(7;14)d in 2014–2015 and 8.5(4;12)d in 2019-2020,  $p = 0.039$ . IV adm of A was used in 12%(n=12) in 2014–2015, and in 2.8%(n=2) in 2019–2020,  $p = 0.073$ . RC CDI was diagnosed in 13%(n=13) in 2014–2015 and 7%(n=5) in 2019–2020,  $p \geq 0.05$ . 6%(n=6) of pt were admitted in ICU due to CDI in 2014–2015 and 2.8%(n=2) in 2019–2020,  $p \geq 0.05$ . IHM R for pt with CDI was 27%(n=27) in 2014–2015 and 16.9%(n=12) in 2019–2020,  $p \geq 0.05$ .

### **Conclusion:**

Rates of patients in elderly and comorbidities as risk factors for CDI did not differ. Increased rate of vancomycin use for initial treatment and shorter duration of treatment were found in 2019-2020. Rates of intravenous antibiotic administration for CDI, cases of recurrent CDI, admission to ICU due to CDI and in-hospital mortality for CDI patients in 2019-2020 decreased insignificantly.

### **References:**

1.McDonald LC et al. Clin. Pr. Guidel. for CDI in Adul. and Child. CID.2018;66(7):e1–48.