P1111

Abstract (poster session)

Monitoring the activity of antimicrobials against multidrug-resistant Clostridium spp.

S. Hawser*, C. Zampaloni, F. Monti, S. Bouchillon, M. Hackel, M. Dowzicky (Schaumburg, US; Epalinges, CH; Collegeville, US)

Background: The incidence of multi-drug resistant (MDR) Clostridium spp. is unclear. Surveillance studies aimed at determining their incidence and susceptibility to antibiotics are necessary in order to better understand the incidence of such etiologic agents. This study evaluated the activity of tigecycline and comparators against MDR Clostridium spp. isolated from infections during 2009 - October 2011. Methods: A total of 1,450 isolates were collected from Europe, of which 462 were multi-drug resistant (MDR; resistant to two antibiotic classes). Isolates were tested for susceptibility following the CLSI guidelines for anaerobes and interpreted using EUCAST guidelines or FDA guidelines for tigecycline. Results: The susceptibility of all and MDR isolates are shown in the Table below: %S, %I, %R, percent isolates susceptible, intermediate or resistant; *, susceptibility determined using FDA breakpoints due to absence of EUCAST breakpoints Conclusions: Of the 1,450 isolates collected, 462 (32%) were resistant to two antibiotic classes. The most active antibiotic was tigecycline with MIC90 of 0.12 - 0.5 mg/L, followed by metronidazole (MIC90 2 mg/L). Susceptibilities were highest for metronidazole and tigecycline (>99% susceptible). Against MDR isolates, only these two agents exhibited susceptibilities >90%.

	All (n = 1,450)					MDR (n = 462)			
Antibiotic	**MIC_{90}**	**%S**	**%I**	**%R**	**Antibiotic**	**MIC_{90}**	**%S**	**%I**	**%R**
Clindamycin	>8	65	-	35	Clindamycin	>8	9	-	91
Meropenem	2	92	4	4	Meropenem	>8	80	8	12
Metronidazole	2	99.6	-	0.4	Metronidazole	2	99.6	-	0.4
Penicillin	4	38	10	52	Penicillin	>32	0	0	100
Pip-Tazo	16	89	9	2	Pip-Tazo	16	71	22	7
Tigecycline*	0.5	99.9	0.1	0	Tigecycline*	0.12	100	0	0