

EV0302

ePoster Viewing

Resistance surveillance & epidemiology: MRSA, VRE & other Gram-positives

Long-term surveillance of antimicrobial resistance of *H. influenzae* in Russia: are there any changes in ten years?

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Background: To investigate the antimicrobial resistance of *H. influenzae* in different regions of Russia from 2004 to 2013.

Material/methods: Clinical isolates of *H. influenzae* have been collected for ten years and stored in the central laboratory of Institute of Antimicrobial Chemotherapy in Smolensk at -70°C. Conventional methods (X-, V-factors requirement, biochemical tests) as well as MALDI-TOF MS (Microflex-LT, Biotyper System, Bruker Daltonics, Germany) were used for identification of the isolates. MIC of 12 antimicrobials were determined by broth microdilution method using cation-adjusted Mueller-Hinton broth (BBL, USA) supplemented with 5% lysed horse blood and 20 mg/L β-NAD (MH-F broth) according to EUCAST guidelines (version 5.0, 2015).

Results: A total 737 of non-duplicated strains of *H. influenzae* were included in the study for ten-year period (2004-2013). The majority of isolates in 2004-2005, in 2006-2009 and in 2010-2013 were isolated from respiratory samples : 86,1%, 88%, 89,1% respectively.

The susceptibility testing results (I/R, %) are presented in the Table.

	I,%	R,%	I,%	R,%	I,%	R,%
Antimicrobial	2004-2005 (n=258)		2006-2009 (n=369)		2010-2013 (n=110)	
Amoxicillin	0	5.4	0	2.7	0	10.0
Amoxicillin/clavulanic acid	0	1.5	0	0.3	0	0.9
Ceftriaxone	0	0	0	0	0	3.6
Levofloxacin	0	0	0	0	0	0

Moxifloxacin	0	0	0	0	0	0
Tetracycline		5	0,5	2.4	0	1,8
Co-trimoxazole	6.6	23.3	6.9	28.9	2.7	30.9
Chloramphenicol	0	4.6	0	2.2	0	1.8

Conclusions: The majority of *H.influenzae* retained good *in vitro* susceptibility to different classes of antimicrobials for ten-year period of the study. β -lactams (amoxicillin, amoxicillin/clavulanic acid, ceftriaxone) and respiratory fluoroquinolones had high *in vitro* activity against tested isolates. No resistant strains to levofloxacin, moxifloxacin were detected. Low susceptibility of *H.influenzae* to tetracycline has been noticed for whole period of the study and high-resistance isolates were dominated for ten-year period of the study.