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Abstract (publication only)

Antimicrobial resistance in Eastern European countries among Gram-negative pathogens isolated from intra-abdominal infections: 2004-2011

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Background: Gram-negative bacilli play an important role in the pathogenesis of intra-abdominal infections (IAI) worldwide. Increasing antimicrobial resistance dictates the continued surveillance and susceptibility testing of pathogens in IAI. The Tigecycline European Surveillance Trial (TEST) examines the susceptibility of pathogens isolated from multiple infectious processes from patients in countries worldwide. The purpose of this report is to examine the susceptibility of gram-negative bacilli isolated from IAI in patients in Eastern Europe from 2004-2011. Methods: 349 clinically significant gram-negative bacilli were obtained from patients with intra-abdominal infections in 10 Eastern European countries. MICs were determined from 170 cumulative sites from 2004 to 2011 using supplied broth microdilution panels. Susceptibility was interpreted according to EUCAST guidelines. Results: The % susceptible for those 349 gram-negative bacilli versus comparative antimicrobial agents is shown in the following table: AK=Amikacin, AC=Amoxicillin-Clavulanate, CPM=Cefepime, CFT=Ceftriaxone, IMI=Imipenem, LEVO=Levofloxacin, PT=Piperacillin-Tazobactam, TIG=Tigecycline NA=No breakpoints assigned Conclusions: Amongst the Enterobacteriaceae: tigecycline, amikacin and imipenem remain the most active agents in vitro. Only amikacin retained >80% susceptibility against *P. aeruginosa* while only imipenem retained 80% activity against *A. baumannii*. The continued monitoring of antimicrobial resistance in IAI pathogens from Eastern Europe is warranted.

Drug (N)	% Susceptible							
	AK	AC	CPM	CFT	IMI	LEVO	PT	TIG
<i>A. baumannii</i> (33)	27.3	NA	NA	NA	80.0	21.2	NA	NA
<i>E. cloacae</i> (51)	98.0	2.0	62.8	52.9	100	82.4	62.8	84.3
<i>E. coli</i> (144)	93.8	68.1	79.9	77.8	100	75.0	86.1	97.9
<i>K. oxytoca</i> (19)	100	79.0	89.5	79.0	100	94.7	84.2	94.7
<i>K. pneumoniae</i> (55)	90.9	50.9	50.9	52.7	100	60.0	58.2	89.1
<i>P. aeruginosa</i> (47)	80.9	NA	68.1	NA	66.7	55.3	72.3	NA