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Abstract (poster session)

In vitro susceptibility of Staphylococcus aureus in Africa–Middle East

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Background: Staphylococcus aureus is the most common cause of skin and soft tissue infections followed by bloodstream infection and pneumonia. Patients with methicillin-resistant S. aureus (MRSA) infections have increased and changed the treatment for S. aureus infections. Tigecycline (TIG) has been shown to have potent activity against community and hospital acquired staphylococcal pathogens. The Tigecycline Evaluation Surveillance Trial (TEST) determined the in vitro activity against methicillin-susceptible S. aureus (MSSA) as well as MRSA of TIG and other antimicrobials commonly prescribed for S. aureus infections. Methods: A total of 1,111 clinical isolates (312 MRSA; 799 MSSA) from Africa-Middle East throughout 2006-2010 were evaluated. Isolates were identified to the species level at each participating site and confirmed by a central laboratory. Minimum inhibitory concentrations (MICs) were determined by the local laboratory using supplied broth microdilution panels, and interpreted according to CLSI guidelines. * Penicillin, cephems, and carbapenem susceptibilities are based on cefoxitin susceptibility for MRSA. Results: 28.1% of S. aureus were resistant to cefoxitin (MRSA). Tigecycline and Vancomycin inhibited 100% of all MRSA. Conclusions: Tigecycline and Vancomycin retained potent activity against S. aureus inhibiting 100% of all MRSA. Since the prevalence of MRSA is increasing worldwide, antimicrobial surveillance is useful in monitoring the performance of different antimicrobials.

Drug	MSSA N=799			MRSA N= 312		
	MIC 90	%S	%R	MIC 90	%S*	%R*
Ampicillin	> 16	13	87	> 16	0	100
Ceftriaxone	4	98.4	0.1	> 64	0	100
Levofloxacin	0.5	96.5	2.3	32	13.8	85.6
Meropenem	0.3	100	0	> 16	0	100
Minocycline	0.5	98.9	0.3	8	81.1	5.8
Tigecycline	0.5	100	0	0.5	100	0
Vancomycin	1	100	0	2	100	0