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Objectives: The aim of this study is to evaluate susceptibility testing results of the hospital acquired (HA) and community-acquired (CA) *S.aureus* strains recovered from various types of specimens .

Methods: 429 *S.aureus* strains recovered from nasal swab 30.3%, wound 26.1%, blood 16.1%, urine 15.9%, sputum 9.3%, sterile fluids 2.3% were studied, between November 2008 to October 2012 in the Ahi Evran University Research and Teaching Hospital, Kirsehir, Turkey. Methicillin resistance was determined by oxacillin, ceftazidime disk diffusion (DD), oxacillin screen agar test, ceftazidime E-test. Antimicrobial susceptibilities to teicoplanin(TEC), linezolid(LZD), penicillin(PEN), gentamicin(GEN), ampicillin-sulbactam(SAM), cefuroxime(CXM), erythromycin(ERY), fusidic acid(FA), trimethoprim-sulphamethoxazole(SXT), tetracycline(TET), ciprofloxacin(CIP), mupirocin (MUP), clindamycin(CLI), rifampicin(RIF), quinupristin-dalfopristin(Q-D) were determined by Kirby-Bauer DD method according to CLSI and French Society for Microbiology (for FA).

Results: 207 (48.3%) *S.aureus* isolates were defined as CA group. Overall the isolates tested 39 (9.1%) (13 sputum, 9 wound, 9 blood, 6 urine, 2 nasal swab) were MRSA. All isolates were susceptible to TEC, LZD, Q-D. Overall the isolates tested resistance to PEN 81.6%, GEN 10.3%, SAM 15.6%, ERY 26.3%, FA 10.3%, SXT 11.4%, TET 25.6%, CIP 19.3%, CLI 15.4%, RIF 12.6%, CXM 12.4%, MUP 8.6%. In general, all tested antimicrobials revealed good activity against MSSA except PEN. Resistance rates in MRSA isolates were over 40% for all antimicrobials tested (Table). In addition, HA isolates were more resistant to all antimicrobials except TET and ERY than CA isolates.

Conclusion: As high resistance rates to ERY, TET, CIP and SXT obtained in this study against MRSA strains, empiric treatment should be monitored closely. Although lower resistance rates were obtained for CA strains, FA and MUP resistance is increasing among inpatients. Considering the high resistance rates in MRSA, continued surveillance is crucial to prevent the spread within hospitals and community.

Table. Antimicrobial resistance rates of *S.aureus* isolates

Antimicrobial	CA- <i>S.aureus</i> (n=207)	HA- <i>S.aureus</i> (n=222)	MSSA (n=390)	MRSA (n=39)
PEN	78.3	84.7	80	100
SXT	9.7	13.1	8.5	41.0
SAM	11.1	19.8	7.2	100
CIP	15.5	23.0	12.8	84.6
FA	6.3	14.0	6.2	51.3
RIF	7.2	17.6	6.2	76.9
GEN	6.8	64.1	4.9	64.1
TET	27.1	24.3	21.0	71.8
CXM	9.7	14.9	4.4	100.0
ERY	27.1	25.7	22.3	66.7
CLI	14.0	16.7	11.3	56.4
MUP	4.8	12.2	4.9	46.2

