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**Original article:**

**Antimicrobial surveillance of Methicillin Resistant Staphylococci**

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**Abstract:**

**Background & objectives:** Methicillin Resistant Staphylococcal strains have emerged as super bugs during the last decade. They are the major cause of community acquired infections as well as nosocomial infections. The glycopeptide, Vancomycin is commonly prescribed to treat infections caused by multiply resistant Staphylococcal strains. The present study was carried out to investigate the prevalence of mainly Vancomycin resistance among MRSA and MRCoNS and also to evaluate resistance to other antimicrobial agents used broadly for treatment.

**Materials & Methods:** A total of282 Staphylococcal strains isolated from different clinical samples were included in this study. Antimicrobial susceptibity test were performed using Kirby-Bauer disk diffusion method, MIC were determined following CLSI guidelines.

**Results:** Out of 282 isolates, 99 isolates (35.10%) were identified as Staphylococcus aureus and the remaining 183 (64.89%) were coagulase negative staphylococci (CoNS), Among these, thirty one (31.31%) strains were MRSA and seventy eight (42.62%) were MRCoNS. High rate of resistance was seen against Ampicillin: 84.64% and 88.46%, Oxacillin: 83.87% and 79.48%. MRSA showed 80.64% resistance to erythromycin. 79.48% resistance was seen against Co-trimoxazole for MRCoNS. Resistance to Vancomycin was found to be 16.12% for MRSA and 8.97% for MRCoNS respectively.

 **Interpretation & conclusion:** Majority of the strains were sensitive to Vancomycin though occasional resistance was observed. Ciprofloxacin and Amikacin were also found to be effective. Sensitivity to other antimicrobial agents is diminishing mainly due to excessive use of voluntary treatment. Antibiotic monitoring should not only be limited to MRSA but sufficient consideration is to be given even to MRCoNS.

**Key words:** MRSA, MRCoNS, Vancomycin