

## ANTIMICROBIALS - I

### CHOICE OF ANTI-STAPHYLOCOCCAL THERAPY

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**Abstract:** *Staphylococcus aureus* is considered to be the most virulent amongst all staphylococci. It is known to elude antimicrobial therapy by adopting various strategies posing therapeutic dilemmas for clinicians, particularly in intensive care settings. The coagulase negative staphylococci like *S. Hemolyticus*, *S. Saprophyticus*, *S. Epidermidis* are relatively less pathogenic unless indwelling devices are present. When complicated or invasive *S. aureus* infection is suspected, blood culture and culture of sample from potential source are essential before starting empirical treatment due to the increased prevalence of methicillin resistant staphylococcus aureus. Disruption of skin, immune compromised conditions, malnutrition, burns, scabies or post varicella lesions are more prone for *S. aureus* infections.

**Keywords:** *Staphylococcus aureus*, Methicillin sensitive staphylococcus aureus, Methicillin resistant staphylococcus aureus, Coagulase negative staphylococcus.

### Points to Remember

- *Staphylococcus aureus* coagulase positive is considered the most virulent amongst all gram-positive genus staphylococci.
- Blood culture and sample from potential focus of infection are a must in suspected moderate/severe staphylococcal infections.
- Surface cultures should be avoided as it reflects contamination rather than true infection.
- MSSA is a *S.aureus* isolate with an oxacillin MIC  $\leq 2$  mcg/mL whereas MRSA is *S.aureus* isolate with an oxacillin MIC  $\geq 4$  mcg/mL.
- Antibiotic choice will differ while treating MSSA or MRSA infections and understanding the local prevalence of MRSA as well as inducible clindamycin resistance is essential.

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