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Identification of *cfr* positive *Staphylococcal aureus* isolate from an ICU case

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Introduction: A Multidrug resistant bacterium poses a formidable challenge in effectively treating infections and is significant factor infection related mortality. The *cfr* (Chloramphenicol-flofenicol resistance) gene encodes methyltransferase which methylates 23S rRNA at A2503, conferring resistance to various classes of antibiotics, such as oxazolidinone, phenicols, lincosamides, pleuromutilins streptogramin A.

We report, presence of *cfr* related drug resistance in methicillin resistant *Staphylococcus aureus* isolated from septicemic patient.

Material and Methods: A total of 59 bacterial isolates obtained from ICU (20) and ocular (39) cases from hospitals across the Hyderabad region were screened for the presence of *cfr* gene, using PCR with specific primers, and a positive control (The plasmid containing *cfr* gene was a gift from Dr. Gopegui ER, Hospital Universitari Son Espases, Palma de Mallorca, Spain).

Result: Our investigations, revealed presence of *cfr* positive *Staphylococcal* isolate obtained from an ICU case. The presence of the multidrug *cfr* gene is a rare in the humans. The bacterial isolate was also found to have higher MIC to linezolid. The presence of the gene is being validated by sequencing.

Conclusion: The present study demonstrates the presence of a *cfr* positive *Staphylococcus aureus*. The particular isolate had a higher MIC for linezolid.

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