

April 22-23, 2019
Athens, GreeceArch Clin Microbiol 2019, Volume:10
DOI: 10.4172/1989-8436-C1-018

GENTAMICIN ENHANCES TOXA EXPRESSION IN *PSEUDOMONAS AERUGINOSA* ISOLATED FROM COW MASTITIS

Atheer Abdul Razzaq and Ansam KhAlid Mahmood

University of Baghdad, Iraq

The present study was undertaken in order to investigate the role of gentamicin in the gene expression of *toxA* in *Pseudomonas aeruginosa* isolated from cow mastitis. A total of ten *P. aeruginosa* strains originally isolated from cows infected with mastitis. Agar dilution methodology was performed to determine the minimal inhibitory concentration of gentamicin, all of which developed resistance toward gentamicin. The findings presented here demonstrated that all these strains harboured *toxA* depending on PCR-based assay. Nonetheless, RT-PCR technique revealed a wide variation in expression of *toxA*. Moreover, the cultivation of *P. aeruginosa* in the presence of gentamicin, significantly ($P < 0.05$), induced the expression of *toxA*, in addition to the possibility of enhancing the virulence of this bacterium. In conclusion, using gentamicin to treat infections caused by *P. aeruginosa* may participate in more severe outcomes.

aalldouri96@yahoo.com