

JOINT EVENT

9th International Conference and Expo on

Proteomics and Molecular Medicine

9th International Conference on

Bioinformatics

&

November 13-15, 2017 Paris, France

First report of Colistin Resistance (*MCR-1*) Gene in *Escherichia coli* and *Klebsiella pneumoniae* Isolated from Clinical Specimens in Khartoum, Sudan

Nahed Adam¹ and Hisham N Altayb²

¹Sudan University of Science and Technology, Sudan

²The National University, Sudan

The aim of this study was to detect the presence of *mcr-1* gene in clinical isolates of *Enterobacteriaceae* in Khartoum State, Sudan, at the period between February and July 2016 using 50 consecutive clinical *Enterobacteriaceae* isolates. Species was identified using standard biochemical tests. Antimicrobial susceptibility was done by using the following antibiotics; ciprofloxacin, gentamicin, co-trimoxazole, cefotaxime, cefuroxime and cefixime. DNA was extracted by using bacterial genomic extraction Kits. For the entire isolated organism, PCR was done to detect *mcr-1* by using specific primer. The most commonly isolated organism was *E. coli* 38 (76%), followed by *Proteus spp.* 8 (16%), and *K. pneumoniae* 4 (8%). Males (60%) are more infected than females (40%), and elderly patients 61-90 years (42%) are found to be more susceptible to infection. We also reported highly resistant rate to ciprofloxacin (66%), gentamicin (68%) and cefuroxime (96%). *mcr-1* gene was detected in 7 (14%) isolates, mostly in *E. coli*. We reported for the first time in Sudan the presence of *mcr-1* gene in clinical isolates, and the prevalence of this gene is higher when compared to other countries.

Biography

Nahed Adam Abdalla Jebrel, Alwatania University, college of medical lab. Khartoum, Sudan.

hishamaltayb@gmail.com

Notes: