



Detection of Metallo- β -Lactamases and their association with integrons among Multidrug Resistant Clinical Isolates of *Escherichia coli*

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Abstract : One hundred and thirty clinical samples of urine, swab (burn, wounds and vaginal) and stool were collected from individuals of both genders and different ages from deferent hospitals and laboratories in Babylon province, during the period of November 2015 to February 2016.

Forty-two *Escherichia coli* isolates were recovered from the study and their identification was confirmed by routine biochemical tests and Vitek2 System. The results revealed resistance to antibiotics at percentages as follows: AMP: 95.24%; ATM: 61.9%; CAZ: 66.66%; GEN: 57.14%; ENO: 42.86%; FEP: 64.28%; IMP: 26.19%; KM: 49%; MEM: 21.43% and TET: 66.66%, while the percentage to multidrug resistance was 79 %. The metallo- β -lactamases enzymes were 45.45% and 57.57% from MDR isolates by CDDT and DDST methods respectively, while the results of production the metallo- β -lactamases enzymes were 69.69% from MDR isolates by E-test IMP. PCR analysis showed the presence of *intI1* in (78.78%), *intI2* (24.24%), and *intI3* (0) from MDR isolates, while the genes that related to antibiotics resistance were *imp* (66.66%), *spm* (15.15%) and *vim* (36.36%) among MDR isolates.

Keywords : *Escherichia coli*, MDR, Intgrons, MBLs genes.

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