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Research Article

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DETECTION CTX-M TYPES EXTENDED SPECTRUM β -LACTAMASES (ESBLs) IN *ESCHERICHIA COLI* ISOLATION FROM PREGNANT URINARY TRACT INFECTIONS (UTIs) IN BASRA, PROVINCE, IRAQ

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ABSTRACT

Urinary tract infections (UTIs) who are cause by *E. coli* an important etiologic agent of morbidity in the presently extended spectrum β -lactamases (ESBLs). Aim of present study was detection the types of CTX-M that spreading in the case of urinary tract infection between pregnant women. Current study were included the collection one hundred samples of the urine from pregnant women from, eighty samples given positive cultivation results, Gram-negative distributed after diagnosed using conventional techniques and conformed by using API 20E system to 37(46.25%) *E.coli*, 25(31.25%) *Klebsiella* spp., 12(15%) *Pseudomonas* spp. And 6(7.5%) *Proteus* spp. Results of detected ESBLs production were showed from 37(46.25%) *E.coli*

isolates the 15(40.54%) ESBLs producing isolates, while 22(59.46%) non- ESBLs producing isolates. The second part of this study the amino acid sequencing data results for 15 plasmid DNA that identified (11) plasmid DNA in isolates (No3,7,11,25, No28,34,37,45,49 and No55,66) similarity the plasmid DNA have accession number in genbank (AJW2218.1, AEZ49563.1 and AMM70777.1) respectively as $bla_{CTX-M-1}$ gene (100%), while (4) plasmid DNA in isolates (No30,72 and No 12,77) similarity the plasmid DNA have accession number in genbank (AGE61862.1 and ACU44517.1) respectively as $bla_{CTX-M-15}$ gene (100%). **KEYWORD:** CTX-M, ESBLs, *E.coli*, UTI.

1. INTRODUCTION

Escherichia coli is one of the common intestinal commensals normal flora, it's a member of Enterobacteriaceae family play important role in diverse hospital infections and community-