

6th International Congress on

Bacteriology & Infectious Diseases

May 21-22, 2018 | New York, USA

Resistance pattern of locally isolated *Escherichia coli* of clinical origin against commonly isolated used antibiotics

Shumaila Naz Malik¹ and Faisal Iqbal Afridi²

¹Jinnah University for women Karachi, Pakistan

²Ziauddin University Hospital Karachi, Pakistan

Introduction: *E. coli* is normal flora of intestine and most common enteric organism, but virulent strain of *E. coli* are involved in many infection like gastroenteritis and urinary tract infection. The main purpose of this study to evaluate the resistance profile of the clinical isolates of *E. coli*, as the increasing resistant to antibiotics creating problem in the disease treatment. For this aspect we tried to find out the existing antimicrobial agent that can use to treat infection related to *E. coli*.

Method: A total 70 strains of *E. coli* from different diagnostic laboratories and hospital in the periods of January to July 2016. The sensitivity of testing of common antibiotics was analyzed by using disc diffusion method. This study revealed that all the isolates of *E. coli* were sensitive to imipenem (100%) followed by tazobactem/piperacillin, amikacin and gentamicin that were 60.7%, 44.44% and 43.33%. On other hand, these organisms are highly resistant to nalidixic acid, cefuroxime and trimethoprim/sulphamethoxazole that were 73.3%, 83.3% and 86.6%.

Result: It can be interpreted that the drug of choice in the study is Imipenem, but they can also be treated with amikacin and gentamicin. The increase use of resistant to antibiotics can cause the emergence of new resistance strains. So there is need to have a tightly regulated system of antibiotic prescription and also need of few antibiotic discoveries for the betterment in the health care industry.

sho.malik-14@hotmail.com