

ABSTRACT

**COMPARISON
BETWEEN EXPOSURE OF CIPROFLOXACIN AND CEFOTAXIME
TO DEVELOP ESBL PRODUCING ESCHERICHIA COLI**

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Objective: To compare ciprofloxacin and cefotaxime exposure to develop ESBL producing *Escherichia coli* (*E.coli*).

Methods: A total of 16 isolates of cefotaxime sensitive *E.coli* and ciprofloxacin were exposed to ciprofloxacin and cefotaxime for 14 days using the Kirby-Bauer antibiotic disc diffusion method. Colonies that grow on the edge of the inhibiting zone are exposed each day by the same method. Further observed the occurrence of resistance to cefotaxime as ESBL screening test. Isolates were resistant, the following day the ESBL was confirmed by the Modified Double Disk Susceptibility Test (MDDST) method using Cefotaxime, Ceftazidime, Astreonam, and Amoxilin Clavulanate antibiotic discs.

Results: From 16 isolates of ESBL producing *E.coli* exposed to ciprofloxacin obtained 4 (25%) to *E.coli* ESBL. ESBL occurs after *E.coli* is exposed to ciprofloxacin on days 5, 6, 7, and 12. While exposed to cefotaxime none becomes ESBL.

Conclusions: There was no difference between ciprofloxacin and cefotaxime exposure to develop ESBL producing *E.coli* ($p=0,101$)

Keywords: *E.coli* ESBL, exposure of ciprofloxacin, exposure of cefotaxime, MDDST