

# IN VITRO ACTIVITY OF QUINOLONES: CIPROFLOXACIN, OFLOXACIN AND NORFLOXACIN

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The in vitro activity of quinolones: ciprofloxacin, ofloxacin and norfloxacin was studied against 1320 bacterial strains collected during 1992-1995 from healthy carries and hospitalized patients, in different areas from the Eastern Romania. Organisms were identified as to genus and species by methods routinely used in microbiology laboratories. Minimum Inhibitory Concentrations were determined by double agar dilution, according M7 A2 interpretative criteria from N.C.C.L.S. In the present study, the tested quinolones showed activity against staphilococci and enterobacteria, with 78,07%-100% sensitive strains (See table 1.)

Table 1. Quinolones sensitivity of bacterial strains isolated between 1992-1995 in Eastern Romania

| Species (nr.of strains)                    | Percent susceptible<br>Ciprofloxacin | Ofloxacin | Norfloxacin |
|--------------------------------------------|--------------------------------------|-----------|-------------|
| Staphilococcus aureus (80)                 | 100                                  | 100       | -           |
| Staphilococcus<br>coagulase-negative (271) | 100                                  | 99,4      | -           |
| Escherichia coli (393)                     | 100                                  | -         | 97,2        |
| Nontyphoidic Salmonella (27)               | 89,9                                 | -         | 81,5        |
| Shigella flexneri (122)                    | 100                                  | -         | 78,1        |
| Enterobacter sp. (27)                      | 92,6                                 | -         | 96,3        |
| Klebsiella pneumoniae (96)                 | 100                                  | -         | -           |
| 94,8 Yersinia enterocolitica (47)          | 100                                  | -         | 100         |
| Proteus sp. (127)                          | 100                                  | -         | 92,2        |

130 Enterobacteriaceae isolated in 1995 were completely sensitive to ciprofloxacin, which has the best activity against the majority of bacterial pathogens. This study shows that the degree of bacterial resistance may be correlated with the use of quinolones in population.