

Emergence of ciprofloxacin resistance in *Escherichia coli* isolates from outpatient urine samples

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Abstract

This study investigated the association between prescription of fluoroquinolones and emergence of ciprofloxacin resistance among *Escherichia coli* isolates in the urine of outpatients from whom a ciprofloxacin-sensitive *E. coli* strain had been isolated previously. Patients were identified and followed using the healthcare databases of Emilia-Romagna Region, Italy. The outcome of interest was the first isolation from urine of an *E. coli* strain resistant to ciprofloxacin. Prescription of fluoroquinolones during the previous 6 months was associated independently with the emergence of ciprofloxacin resistance; the strength of the association varied according to individual fluoroquinolone agents.