

Resistance to fluoroquinolones and treatment failure/short-term relapse of community-acquired urinary tract infections caused by Escherichia coli

Journal of Infection, Volume 57, Issue 3, Pages 179-184

C. Gagliotti, R. Buttazzi, S. Sforza, M. Moro, Emilia-Romagna Antibiotic Resistance Study Group;

OBJECTIVES: This study aims to evaluate the impact of resistance to fluoroquinolones on the short-term outcome of community-acquired urinary tract infections (UTIs) caused by Escherichia coli. **METHODS:** Patients were identified and followed, during 2006, using the health care databases of the Emilia-Romagna Region. The outcome of interest was the treatment failure/short-term relapse (the re-isolation of E. coli from urine between 4 and 30 days after the first isolation). **RESULTS:** Resistance to fluoroquinolones increases the risk of treatment failure/short-term relapse in women with uncomplicated community-acquired UTIs caused by E. coli (Rate Ratio=1.85, 95% CI 1.32-2.60). The efficacy of fluoroquinolones for community-acquired UTIs of men was significantly modified by the resistance status of E. coli. Prescription of these agents was associated with a reduced occurrence of the outcome only in men with a ciprofloxacin sensitive first isolate (Rate Ratio=0.50, 95% CI 0.25-0.99). **CONCLUSIONS:** Resistance to fluoroquinolones of E. coli is a growing problem with a negative impact on the outcome of community-acquired UTIs; therefore, the prescription of these agents should be limited to infections for which they are recommended, avoiding their use in uncomplicated UTIs.