

Fluoroquinolone utilization in the emergency departments of academic medical centers: prevalence of, and risk factors for, inappropriate use.

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Abstract

BACKGROUND:

Resistance to fluoroquinolone (FQ) antibiotics has risen markedly in recent years and has been associated with increasing FQ use; however, few data exist regarding FQ use patterns. Designing strategies to limit FQ resistance by optimizing FQ use depends on identifying patterns of inappropriate FQ use. Use of FQs in emergency departments (EDs) has not been studied.

METHODS:

We studied 100 consecutive ED patients who received an FQ and were subsequently discharged. Appropriateness of the indication for use was judged according to existing institutional guidelines. A case-control study was conducted to identify the prevalence of, and risk factors for, inappropriate FQ use.

RESULTS:

Of 100 total patients, 81 received an FQ for an inappropriate indication. Of these cases, 43 (53%) were judged inappropriate because another agent was considered first line, 27 (33%) because there was no evidence of infection based on the documented evaluation, and 11 (14%) because of inability to assess the need for antimicrobial therapy. Although the prevalence of inappropriate use was similar across various clinical scenarios, there was a borderline significant association between the hospital in which the ED was located and inappropriate FQ use. Of the 19 patients who received an FQ for an appropriate indication, only 1 received both the correct dose and duration of therapy.

CONCLUSIONS:

Inappropriate FQ use in EDs is extremely common. Efforts to limit emergence of FQ resistance must address the high level of inappropriate FQ use in EDs. Future studies should evaluate the impact of interventions designed to reduce inappropriate FQ use in this setting.