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Compliance with Azithromycin Versus Erythromycin in the Setting of a Pertussis Outbreak.

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BACKGROUND: Erythromycin has traditionally been the choice for prophylaxis and treatment of pertussis, but recently azithromycin has been recommended as another first-line agent. We evaluated treatment adherence between exposed persons giving erythromycin or azithromycin during a community-wide pertussis outbreak.

METHODS: This was a case-control study. All cases and their contacts were prescribed either 56 doses of erythromycin over 14 days or 5 doses of azithromycin over 5 days. A standardized questionnaire regarding demographics, side effects, and compliance with therapy was administered by mail or telephone interviews.

RESULTS: Of 244 persons prescribed erythromycin, 139 (57%) completed the full course compared with 234 (93%) of 251 persons prescribed azithromycin (rate ratio [RR] 4.5; 95% confidence interval [CI], 2.9-7.0). The primary reason for not completing erythromycin was side effects in 79 (76%) persons, of whom 72 (91%) reported gastrointestinal upset, compared with azithromycin side effects in 6 (35%) of whom 5 (83%) reported gastrointestinal side effects.

CONCLUSIONS: Azithromycin was associated with significantly higher completion rates than erythromycin. Due to side effects, the use of azithromycin may be preferable to erythromycin in outbreaks of pertussis.

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