Loperamide for the Treatment of Traveler’s Diarrhea: Broad or Narrow Usefulness?

EDITORIAL COMMENTARY: A conclusion from the analyzed trials is that loperamide should be combined narrowly with an antimicrobial drug for travelers to areas where enterotoxigenic *E. Coli* is anticipated to be the major diarrheal pathogen. Loperamide should not be regarded as a broad empirical fix, because it does not benefit patients with excessive diarrhea, such as those with cholera, and should not be used to treat bloody dysentery; patients with *Shigella* or *Campylobacter* infection may not derive any benefit from the drug, but they seem not to be harmed by it.

PMID: 18781871 [PubMed - indexed for MEDLINE]

Effect of Adjunctive Loperamide in Combination with Antibiotics for Traveler's Diarrhea: A Review.
Riddle MS, Arnold S, Tribble DR.

BACKGROUND: A previous Cochrane Collaboration review established an effective advantage of antibiotic therapy, compared with placebo, for treatment of traveler's diarrhea. The goal of the present study was to conduct a systematic review of the literature to establish the effect on treatment outcomes of using antimotility agents in conjunction with antibiotic therapy.

METHODS: The meta-analysis was conducted through searches of electronic databases and pertinent reference lists (including other review articles) and consultation with experts in the field. Clinical trials on therapy of infectious diarrhea in adult populations that met eligibility criteria were studied. Data were extracted and verified by 2 independent investigators and were analyzed for outcomes of clinical cure at 24 h, 48 h, and 72 h and time to last unformed stool. Study quality, heterogeneity, and publication bias were assessed. When appropriate, effect estimates among studies were pooled and sensitivity analyses were performed.

RESULTS: Nine studies consisting of 12 different adjunctive loperamide antibiotic regimens were included for analysis. Among 6 paired studies comparing antibiotics alone versus antibiotics in combination with loperamide, the odds of clinical cure at 24 h and 48 h favored combination therapy, with summary odds ratios of 2.6 (95% confidence interval, 1.8-3.6; P = .20 by chi(2) heterogeneity statistic) and 2.2 (95% confidence interval, 1.5-3.1; P = .20, by chi(2) heterogeneity statistic), respectively, with no evidence of heterogeneity. Factors that possibly affect advantage of combination therapy over solo therapy included increased frequency of pretreatment diarrhea and higher prevalence of noninvasive pathogens.

CONCLUSION: Antibiotic therapy with adjunctive loperamide offers an advantage over antibiotics alone by decreasing the illness duration and increasing the probability of early clinical cure.

PMID: 18781873 [PubMed - indexed for MEDLINE]