Summary of

Acute Diarrheal Infections in Adults

JAMA September 2017. Acree, M et al.

Summary

(1) Empirical antimicrobial therapy is not recommended for routine acute diarrheal infection or mild traveler-associated diarrhea (TD) (strong recommendation; high level of evidence [LOE]).

(2) Probiotics or prebiotics are not recommended for treatment of acute diarrhea in adults, except in cases of post-antibiotic-associated illness (strong recommendation; moderate LOE).

(3) **Disabling TD with fever should be treated with azithromycin.**

(4) **In patients receiving antibiotics for TD, use adjunctive loperamide therapy to decrease duration of diarrhea and increase chance of cure (strong recommendation; moderate LOE).**

(5) Culture-independent methods of stool testing (eg, polymerase chain reaction [PCR]) may be used to identify etiology in adult patients with dysentery, moderate to severe diarrhea, and symptoms lasting more than 7 days (strong recommendation; low LOE).

(6) Persistent diarrhea (14-30 days) should be initially evaluated with culture and/or culture-independent microbiologic testing.

Definition

Acute diarrhea is <14 days.

Epidemiology

- Most adults who have not traveled abroad have no cause identified.
- Norovirus is the most common cause, 26% of cases in the ED. 90% of deaths are >65yo.
- Bacterial infections amenable to abx (shigella, salmonella, campylobacter, shiga toxin-producing E coli, Vibrio, enterotoxigenic E coli) were identified in only 9% of acute diarrhea in EDs.
- Pathogens are identified in 50-94% of traveler's diarrhea, usually bacterial.
- Persistent diarrhea >/= 14days caused by intestinal parasites (Giardia, Cryptosporidium, Entamoeba histolytica and Cyclospora, Microspora and bacteria (enteroaggressive E coli, Shigella, Campylobacter, Salmonella and V parahemolyticus).

Treatment

- A Cochrane review from 2000 showed a clear benefit of antibacterials in shortening duration of moderate to severe TD.
- The Cochrane review and 9 randomized trials cited by the guideline examined use of fluoroquinolonesvsplaceboforTDtreatmentandfoundoverallshort-enedduration ofsymptoms.
- Azithromycin was compared with fluoroquinolones in 4 clinical trials cited by the guideline and found to be as efficacious in a single dose or as 500 mg/d for 3 days.
- Hazard ratio of 3.44 for developing c diff colitis while on fluoroquinolones.
- Probiotics showed a reduction in mean duration of diarrhea of 24.8 hours
- **Loperamide was more efficacious than bismuth subsalicylate for symptom duration.**
- No relationship between type of food consumed and risk of TD.
- Prophylactic abx should be restricted to travelers outside of the US and Europe who are at high risk of TD. Rifaximin is favored b/c of higher safety and lower risk of C Diff.