Letters to the Editor

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Antibiotics Usually Inappropriate in Children with Gastroenteritis

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TO THE EDITOR: The use of antibiotics was not mentioned in this article. Unfortunately, antimicrobial therapy is often used inappropriately in acute enteric infections. Gastroenteritis in children usually is infectious and often caused by viruses.[1] Despite this, antibiotics are prescribed to 8 percent of outpatients one to 18 years of age with acute gastroenteritis, whereas stool cultures are performed in only 3 percent.[2] In another study of emergency and urgent care visits in children, 24 percent of visits for acute diarrheal illness resulted in antibiotic prescriptions.[3]

Antibiotics can be useful in the treatment of *Shigella* or *Campylobacter* infection, if started within two days of symptom onset, but are not usually indicated for *Salmonella* infection, and are not effective against toxin-mediated illnesses or viral infections. Clinically, it is difficult to distinguish between viral and bacterial causes of acute gastroenteritis; hence, initial treatment decisions are largely empiric. Not only are antimicrobials not effective against most causes of diarrhea, they can also worsen the course of illness. Inappropriate antimicrobial use can lead to adverse outcomes, increased costs, and antimicrobial resistance.[4] Use of antibiotics can substantially increase the risk of hemolytic uremic syndrome following infection with *Escherichia coli* O157:H7.[5] Antibiotics do not improve the course of most noninvasive *Salmonella* infections, but can markedly prolong excretion of the pathogen.[4] It is imperative that physicians limit the use of antimicrobials without laboratory confirmation of the etiology of an acute episode of diarrhea. Antibiotics are not indicated for most mild or moderate episodes, and if antimicrobial treatment is being contemplated, stool cultures should be performed.

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Clarification

Unclear statements about effectiveness of ACE inhibitors and angiotensin II receptor blockers. The *Clinical Evidence Handbook* (July 15, 2012, p. 182) contained two statements about the combination of angiotensin-converting enzyme (ACE) inhibitors and angiotensin II receptor blockers that could have been more clear about which populations were being discussed. The first statement, "Combined treatment with angiotensin II receptor blockers and ACE inhibitors may lead to a greater reduction in hospital admissions for heart failure compared with ACE inhibitor treatment alone" (p. 182), refers to patients who already have a heart failure diagnosis. The second statement, "The combination of angiotensin II receptor blockers and ACE inhibitors seems no more effective than ACE inhibitors alone and causes more adverse effects" (p. 182), refers to persons with asymptomatic left ventricular systolic dysfunction or risk factors for heart failure who do *not* have a heart failure diagnosis. ■