

researchers then randomized patients to receive PCI (n = 105) or placebo intervention (catheterization without intervention). Including a sham intervention makes this study unique. All patients received dual antiplatelet therapy until the final assessment at six weeks after intervention. Four of the placebo-treated patients had a procedural complication that resulted in PCI but were analyzed in the placebo group. After six weeks, each group had a few seconds of increased exercise time but the difference in improvement was not significant. Additionally, there were no differences in physical limitation, angina frequency, or angina stability. Finally, the authors found no differences in quality of life.

**Study design:** Randomized controlled trial (double-blinded)

**Funding source:** Government

**Allocation:** Concealed

**Setting:** Outpatient (specialty)

**Reference:** Al-Lamee R, Thompson D, Dehbi HM, et al.; ORBITA investigators. Percutaneous coronary intervention in stable angina (ORBITA): a double-blind, randomised controlled trial [published correction appears in *Lancet*. 2018;391(10115):30]. *Lancet*. 2018;391(10115):31-40.

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## Short Courses of Antibiotics as Effective as Longer Courses for Outpatient Infections

### Clinical Question

Are short courses of antibiotics as effective as longer courses for common outpatient infections?

### Bottom Line

Just about every time someone asks, "Can I get away with a shorter course of antibiotics," the answer is, "Yes, you can." Shorter courses reduce cost and may reduce the likelihood of adverse events. (Level of Evidence = 1a)

### Synopsis

This is a relatively new kind of study: a systematic review of systematic reviews, also called a systematic overview. The authors searched five databases and identified nine systematic reviews that compared the duration of antibiotic therapies for a common outpatient infection. The reviews included between two and 17 studies, with a total of between 395 and 5,763 patients. The best-studied conditions were urinary tract infection (UTI), sinusitis, and community-acquired pneumonia (CAP). The authors found that, in children, five to seven days was as good as 10 days for strep pharyngitis; three days was as good as five days for CAP; more than two days was as good as seven or more days for otitis media; and two to four days was as good as seven to 14 days for UTI. In adults, three to seven days was as good as six to 10 days for acute bacterial sinusitis; three days was as good as five or more days for uncomplicated UTI in nonpregnant women; and seven to 14 days was as good as 14 to 42 days for acute pyelonephritis. The authors also found that seven or fewer days was as good as more than seven days for CAP, and three to six days was as effective as seven to 14 days for UTI in older women. There was some evidence that shorter courses resulted in fewer adverse events when treating acute otitis media in children and acute sinusitis in adults.

**Study design:** Meta-analysis (randomized controlled trials)

**Funding source:** Government

**Setting:** Various (meta-analysis)

**Reference:** Dawson-Hahn EE, Mickan S, Onakpoya I, et al. Short-course versus long-course oral antibiotic treatment for infections treated in outpatient settings: a review of systematic reviews. *Fam Pract*. 2017;34(5):511-519.

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