

**Treatment of Streptococcal Pharyngitis With Once-Daily Amoxicillin
Versus Intramuscular
Benzathine Penicillin G in Low-Resource Settings:
A Randomized Controlled Trial**

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Abstract

Background: Primary prevention of acute rheumatic fever is achieved by proper antibiotic treatment of group A β -hemolytic streptococcal (GAS) pharyngitis. *Methods:* To assess noninferiority of oral amoxicillin to intramuscular benzathine penicillin G (IM BPG). Children (2 to 12 years) meeting enrollment criteria were randomized 1:1 to receive antibiotic treatment in 2 urban outpatient clinics in Egypt and Croatia. *Results:* A total of 558 children (Croatia = 166, Egypt = 392) were randomized, with 368 evaluable in an intention-to-treat (ITT) analysis, and 272 evaluable in the per protocol (PP) analysis. In Croatia, ITT and PP treatment success rates were comparable for IM BPG and amoxicillin (2.5% difference vs 1.1% difference, respectively). In Egypt, amoxicillin was not comparable with IM BPG in ITT analysis (15.1% difference), but was comparable in PP analysis (-9.3% difference). *Conclusion:* If compliance is a major issue, a single dose of IM BPG may be preferable for treatment of GAS pharyngitis.

Keywords

streptococcal pharyngitis, randomized clinical trial, amoxicillin, intramuscular benzathine penicillin G