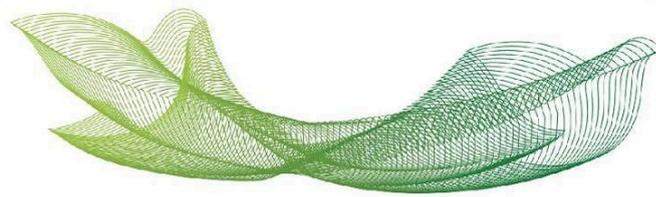




Tipo	Periódico
Título	Efficacy of Doxycycline as Preexposure and/or Postexposure Prophylaxis to Prevent Sexually Transmitted Diseases: A Systematic Review and Meta-Analysis
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Resumo	<p><b>Introduction:</b> Bacterial sexually transmitted infections (STIs), specifically infection by <i>Chlamydia trachomatis</i>, <i>Neisseria gonorrhoeae</i>, and <i>Treponema pallidum</i>, have an important burden worldwide. The use of doxycycline as preexposure prophylaxis (PREP or doxy-PREP) or postexposure prophylaxis (PEP or doxy-PEP) might be effective as prophylaxis because it is effective against <i>C. trachomatis</i> and <i>T. pallidum</i>.</p> <p><b>Aims:</b> Our objective was to evaluate the efficacy of doxycycline as PREP or PEP against bacterial STIs (<i>C. trachomatis</i>, <i>N. gonorrhoeae</i>, and <i>T. pallidum</i>).</p> <p><b>Methods:</b> A systematic review and meta-analysis of randomized clinical trials of a high-risk group of individuals was conducted to evaluate whether doxycycline is as effective as PREP or PEP in preventing bacterial STIs. The PubMed-MEDLINE (MEDlars online), Cochrane, Scientific Electronic Library Online (SciELO), and Latin America and the Caribbean Literature on Health Sciences (Literatura Latino-Americana e do Caribe em Ciências da Saúde -LILACS) databases were searched for randomized clinical trials published up to March 2024. Data were extracted from published reports. Hazard ratios (HRs) and risk ratios (RRs) with 95% confidence interval (CI) were pooled across trials.</p> <p><b>Main outcome measure:</b> The primary end points were any incidence of bacterial STIs and individual STI infections.</p> <p><b>Results:</b> A total of 4 studies were included in the analysis, 3 of which evaluated doxy-PEP and 1 evaluated doxy-PREP. In the doxy-PEP group, a total of 1182 participants were evaluated. In the pooled analysis of doxy-PEP studies, the incidence of the first STI was lower in the doxy-PEP group (HR, 0.538 [95% CI, 0.337-0.859]; I<sup>2</sup> = 77%; P &lt; 0.05). Regarding individual infections, only 2 studies were included. In the doxy-PEP group, the incidence of individual infection of <i>C. trachomatis</i> was lower compared with controls (RR, 0.291 [95% CI, 0.093-0.911]) (I<sup>2</sup> = 89%; P &lt; 0.05). Because only one study evaluated</p>



doxy-PREP, it was not possible to calculate a meta-analysis index; however, the use of doxycycline as PREP was associated with a decrease in the rate of any STI.

**Conclusions:** The use of doxy-PEP might reduce the first STI, mainly *C. trachomatis*, if used within 72 hours after condomless sex. The use of doxy-PREP might also decrease the chance of any STI; however, only 1 study was evaluated.

Fomento