**TITLE:** Antimicrobial susceptibility profile of *Enterococcus* isolates from patients with urinary tract infection and healthy individuals

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**ABSTRACT:**

Enterococci are members of the indigenous intestinal microbiota of humans and other animals and are also considered as relevant nosocomial pathogens due to several properties such as persistence in hospital environment and easy dissemination. Besides their intrinsic resistance to antimicrobial agents, they demonstrate prowess to acquire additional resistance markers. Enterococci have been commonly associated with the etiopathogenesis of community acquired urinary tract infection (UTI), a highly prevalent disease. In this investigation, we addressed the antimicrobial susceptibility profile of 68 enterococci isolates obtained from faecal specimens of healthy individuals [HI; n = 33: *E. casseliflavus* (n = 1), *E. faecalis* (n = 3), and *E. faecium* (n = 29)] and urine of UTI patients [n = 35 (*E. faecalis*)]. Disc diffusion technique was employed and the following antimicrobial agents were tested: ampicillin, ciprofloxacin, chloramphenicol, erythromycin, levofloxacin, linezolid, penicillin G, tetracycline, and vancomycin. Considering the HI group, *E. casseliflavus* isolate displayed a susceptibility profile except for intermediate resistance to ciprofloxacin. In regard to *E. faecium*, resistance rates were overall low (erythromycin and tetracicline 10.3% and ciprofloxacin 3.4%). Intermediate resistance rates to erythromycin (65.5%) and ciprofloxacin (51.7%) should be mentioned. Among the three *E. faecalis* isolates, 66.7% intermediate resistance to ciprofloxacin and erythromycin deserves mention. Regarding the UTI group, a dissimilar profile was observed. Resistance against all antimicrobial tested except for linezolid and vancomycin was detected. Among this set of *E. faecalis*, resistance rates to tetracicline (68.6%) and erythromycin (51.4%) and intermediate resistance to vancomycin (28.6%) and ciprofloxacin (22.9%) should be highlighted. Although not alarming yet, considering the community origin of enterococci isolates the antimicrobial susceptibility profile observed raises great concern.

**Keywords:** *Enterococcus*, urinary tract infection, antimicrobial resistance.

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