TITLE: ENTEROBACTERIA CAUSING BACTERIURIA AND URINARY TRACT INFECTION (UTI) IN PREGNANT WOMEN.

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ABSTRACT: UTIs are infections usually caused by Gram-negative bacteria, mainly enterobacteria, commonly acquired in the community or in hospitals. In individuals without anatomical or functional abnormalities, UTIs are usually self-limited, however they may recur. The anatomical and physiological changes imposed into the urinary tract by pregnancy may predispose to the transformation of asymptomatic bacteriuric women on pregnant women with symptomatic UTIs, thus investigating the epidemiology of UTI (bacterial isolates and sensitivity to antibiotics) during pregnancy is key to guiding interventions. In the present study, we investigated the presence of enterobacteria that cause bacteriuria and UTI in pregnant women in the city of São João do Triunfo-PR from 2014 to 2015. From the 107 samples analyzed, we detected the presence of *Escherichia coli* in 35 (32.7%), of the clinical samples, *Klebsiella sp*. in 33 (30.8%), followed by *Proteus sp*. (22.5%) and *Enterobacter sp* (14.0%). Concerning antimicrobial resistance, the highest rates of multiresistance were observed among *Escherichia coli* isolates, where 40% isolates were resistant to four or more antibiotics and 8.6% isolates were resistant to more than six antimicrobial agents. *Klebsiella sp.* were the most sensitive to the antimicrobials tested, 72.7% were sensitive to all the antibiotics studied. Infections caused by *Escherichia coli* were commonly related to high counts of colony-forming units (CFU), in which case 74.3% of samples were counted above 100,000 CFU/mL, while all samples positive for *Klebsiella sp*. and *Enterobacter sp*. produced infections with counts below 100,000 CFU/mL, whereas for *Proteus sp.* most samples (91.7%) showed low counts, less than 100,000 CFU/mL. Our results demonstrate that *Escherichia coli* is the main enterobacterium that causes UTI in pregnant women, mainly through multi-drug resistance strains, whereas *Klebsiella sp*., *Enterobacter sp*. and *Proteus sp*. produced only bacteriuria.

Keywords: UTI, pregnancy, *Escherichia coli*, bacteriuria.