

**Title: PREVALENCE OF URINARY TRACT INFECTION IN PATIENTS OF A LABORATORY OF EAST SIDE OF SÃO PAULO**

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**Abstract:**

Urinary tract infection (UTI) is an infectious process in any structure of the urinary system caused by microorganisms invasion. It is the second most common infection in humans, being predominant in women, besides being one of most frequent medical diagnosis. It stands out not only because of their frequency, but also the possibility of originate serious complications, for example, renal failure and sepsis. Clinically, it presents several cases ranging from simple cystitis even cases severe and irreversible as pyelonephritis. It was used in the study, techniques that determine quantitatively the bacteria together with the urinalysis and urine culture. Quantitative urine culture showed bacterial growth, allowing the isolation of the etiological agent and in addition there was the study of antimicrobial susceptibility through antibiogram. Therefore, we observe all tests performed in the period from 2013 to March 2015, considering only positive cultures. Thus, we saw that in 54.5% of the positive cultures the pathogen found was *Escherichia coli*, showing that this is the most prevalent pathogen followed by *Staphylococcus sp* with 14.5% and two other bacteria with lower incidence and *Enterobacter aerogenes* 3, 3% and *Providencia alcalifaciens* with 2.9%. However, antibiotics made in bacterias of *Escherichia coli* present higher index of resistance to Ampicillin with 95%, followed by Nalidixic acid with 74%, Amoxicillin and Clavulanic Acid with 62% and Sulfamethoxazole and Trimethoprim with 47% indicating ineffectiveness of these antibiotics against the pathogen. Since, *Staphylococcus sp* shows resistance to Ampicillin with 20% followed by Penicillin with 15%, Tetracycline and Oxacillin with 14%. As other bacteria *Enterobacter aerogenes* and *Providencia alcalifaciens* have low resistance to antibiotics Ampicillin with 5%, Amoxicillin with 4%, Cephalothin with 4%, Nalidixic acid with 2%, Ampicillin with 6%, Cephalothin with 5%, Nitrofurantoin with 4% and Tetracycline with 4%, respectively. However, the study showed that *Escherichia coli* and *Staphylococcus sp* are the most frequent etiological agents causing the UTI in patients attended in the laboratory during the period from 2013 to March 2015. Beyond the study of bacterial resistance be necessary to indicate new options therapeutic.

**Key-words:** Urinary infection, Renal Physiology, Urine culture, Antibiogram.

**Agency Development:** Private