TITLE: EVALUATION OF ANTIMICROBIAL SENSITIVITY PROFILE OF ESCHERICHIA COLI STRAINS ISOLATED FROM CLINICAL MATERIAL SENT TO A COMMERCIAL LABORATORY FROM THE CITY OF BAURU- SP, 2013 TO 2014.

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ABSTRACT:

It is known that bacterial resistance has emerged in recent years as a major worldwide problem, becoming a threat against the treatment of infectious diseases caused by bacteria, hampering the success of surgeries, chemotherapeutic treatments and, ultimately, increasing public health costs. Microbial resistance is related to microorganisms that, exposed to an antibiotic, undergo an alteration and develops resistance against these substances, leading these microorganisms to remain active. In addition, they still continue providing infection and can transfer virulence factors that make other bacteria resistant. Multiresistant bacteria are present in humans, animals and environment. The close contact of humans and animals has facilitated the transmission of these agents through cross-transmission of them, further increasing bacterial resistance, culminating in ineffective treatments for severe patologies. The objective of this work was to evaluate, through laboratory results, the sensitivity profile of Escherichia coli isolated from several infections in dogs undergoing routine antimicrobials treatment. It was verified among the 78 samples obtained, 18 of these samples were linked to investigations of pathologies related to the urinary tract, and 11 of these samples were identified as strains of Escherichia coli presenting resistance to more than two antibiotics, representing a great risk in public health. The rational use of antibiotics, microbiological assessment and correct prescription of drugs may contribute to the reduction of resistant bacteria selection for animals and humans.

Keywords: Escherichia coli, microbiology, resistance