Title: IMPACT OF THE IMPLEMENTATION OF THE URINARY PRESERVATIVE - BORIC ACID – FOR URINE CULTURE.

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Summary:

The urine transportation for culture exams represents a constant challenge to microbiology. The test reliability is related to the specimen collection and proper transport. Although the urine is sterile, it can be easily contaminated at the time of collecting with the usual microbiota of the perineum, vagina, prostate and urethra. Urines have a limited preservation deadline, consequently is necessary the use of dip slide (laminocultivo) or tubes with preservative to transport samples from long distances. The use of dip slide as a medium of transportation had presented some problems in routine. The implementation of boric acid has emerged as a better alternative for the urine transportation because it is a reliable preservative which maintain the sample preserved for up to 48 hours at room temperature. In this study we evaluated the impact of the boric acid implementation as a reliable alternative for transporting samples which are received from laboratories localized at different states whose are assessed by the Hermes Pardini. We evaluated the amount of urine culture and contaminating urine samples from those laboratories comparing the data obtained in the year 2013 and 2014, that is, before and after implementation of the sending of urines in preservative boric acid. The data volume of tests and recollect by contamination were obtained through SADIG's data basis. The tubes with preservative began to be received in January 2014. In June, all dip slide stock run out, and the samples were received only in boric acid. The exchange of this input has impacted positively on the volume of exams and the contamination index. The monthly average of tests was 10.046 passing to 18.166 from July 2014, which represents an increase of 6.78 % in the volume of tests. The contaminated samples were reduced to an average of 14.0% in 2013, to 10.32% in the first semester 2014 and 6.78% from July 2014, reducing the number of recollection to 7.22%. The processing of this exam has become the same for our own samples and from assessed laboratories, leading to process improvement with reduction of the release time of the report. The boric acid proved to be a better alternative in urine transport, acting as bacteriostatic, saving for 48h at room temperature the number of bacteria in the sample without derail them. The increase in the amount of tests indicates a better customer perception related to dip slide the previous methodology.

Keywords: Urine, boric acid, dip slide, transport of urine.