

Title: MICROBIAL EVALUATION OF URINE SAMPLES PRESERVED WITH BORIC ACID

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ABSTRACT:

Urinary tract infections affect individuals of both genders and all ages, mainly patients that predispose of favorable conditions for infections such as mechanical or functional obstruction of the urinary tract. The urine collected for examination of culture may be contaminated by urethral microbiota, or the gastrointestinal system. It is recommended that culture be performed within two hours after collection and then cooling the sample to its conservation. However, it is not always possible that the same occurs, for example where the sample is transported either by the patient or even in the case where the laboratory has collection points and a central analyzes. In this study 97 samples collected by the patient were analyzed, the first morning urine by spontaneous voiding, from midstream, in an universal disposable, sterile vial and a wide gap. The samples were divided into aliquot A, without preservative and kept under refrigeration, and aliquot B, containing the preservative boric acid maintained at room temperature. Both aliquots were sowed quantitatively, in Agar Cromoclin US (Laborclin – Pinhais, Brazil), which is a chromogenic culture, and allows direct and presumptive identification of the main uropathogens based on staining of bacterial colonies. The first sowing was named as Time Zero culture. The aliquots were sowed again after 8 and 24 hours, being named culture time 1 and culture time 2, respectively. A count of the culture colonies was performed, and comparing the data obtained from the two aliquots, is perceived that cooling boric acid has a good bacteriostatic effect for a period of 24 hours. Therefore, boric acid proved to be a good preservative for urine specimens intended for a culture period of 24 hours since refrigeration is not feasible.

KEY WORDS: Boric acid; urine culture; Urine Preservative; Micro-organisms.