

Title: EPIDEMIOLOGICAL SURVEILLANCE CULTURES OF MULTIDRUG-RESISTANT *Acinetobacter baumannii*: ORAL OR RECTAL SWAB?

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Acinetobacter baumannii is an important hospital pathogen that exhibits resistance to many antibiotics. Surveillance cultures for this microorganism can be performed from samples of oral or rectal mucous since these sites can be reservoirs of this microorganism. Protocols for hospital surveillance cultures collections are usually directed to other organisms requiring this research for this important pathogen. This study aimed to evaluate the frequency of isolation of *A. baumannii* in paired collections of oral and rectal swabs in order to detect possible differences in the detection of this species in different sites. A retrospective investigation within 5 years of collection was performed in a tertiary hospital in northwestern Paraná. The protocol for collection was established in the institution as follows: collections of oral and rectal swabs on admission of patients from other health services with high less than 48 hours and fortnightly collections of monitoring for patients hospitalized more than 15 days. In parallel, we collected data on the number of clinical isolates of *A. baumannii* for the same period. Both swabs were inoculated on MacConkey agar which it was added carbapenems discs for screening Gram-negative bacilli multiresistant. Samples with morphotinctorial characteristics of *Acinetobacter spp.* were identified by the equipment Phoenix BD®. 641 *A. baumannii* were recovered from clinical samples and surveillance. The distribution of the isolation of *A. baumannii* varied during the years analyzed and 61 in 2009; 78 in 2010; 161 in 2011; 148 in 2012 and 176 in 2013. Also a variation in detection compared to rectal or oral colonization site was detected in each year, nevertheless, a total of 118 *A. baumannii* were recovered from surveillance samples; 89 (13.9%) were from oral swabs and only 29 (4.5%) of rectal swabs. The importance of oral colonization as a potential reservoir of multiresistant bacteria in both hospitalized patients and the community has been recognized by some researchers. The results of this study reflect the importance of research of oral mucosa in the epidemiological surveillance of these microorganisms mainly as sources of respiratory infections. The fact of achieving greater positivity in oral swabs than in rectal (three times 29/89) for *A. baumannii* makes us conclude that this site should be necessarily included when goal for the epidemiological investigation of this important pathogen.

Keywords: *Acinetobacter baumannii*; surveillance; multidrug resistance.