

TITLE: SURVEILLANCE CULTURE IN PATIENTS OF AN INTENSIVE TREATMENT UNIT: PREVALENCE AND DATA CORRELATION

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ABSTRACT

Host colonization by microorganism is a possible endogenous pathway of infections. Surveillance culture for resistant microorganism is an important measure to prevent incidence and transmission of infections caused by them, because the result can be used as criterion for put patient in contact prevention, that means isolation or cohort and increase of the rigor in the use of personal protection equipment and hygiene during hospital care. The aim of this study was set the rate of patients colonized by multiresistant bacteria who interned in a Intensive Care Unit (ICU). For this, a cross-section study was conducted to evaluate data from patients with a positive surveillance culture from August 2014 until December 2017. At the time of intern of all patients in the adult ICU, collections were made of the nasal and rectal using swab. The microorganisms evaluated were: carbapenemase producing bacteria (KPC), methicillin - resistant *Staphylococcus aureus* (MRSA) and vancomycin- resistant *Enterococcus* ssp. (VRE). It was verified that 8.97% of the surveillance cultures were positive in 2014, 9.34% in 2015, 12.59% in 2016 and 14.1% in 2017. The incidence of positive surveillance cultures increased by 5.13% during the period analyzed. Of the positive surveillance cultures, 66.1% had KPC, 40.6% MRSA and 3.6% VRE. Of the patients with a positive surveillance culture, 56.58% came from other sectors of the institution, 27.9% from the external community and 16.33% from other hospitals. As a result of the colonized patients, 56.6% died. Of these 51.2% were colonized by KPC and 45.4% by MRSA and 5.0% by VRE. Of which 63.1% had systemic arterial hypertension and 32.6% of diabetes mellitus and 8.5% had chronic kidney disease. KPC and MRSA have similar frequency of isolation obtained from community patients. The importance of investigation about colonization of patients by multiresistant bacteria was evidenced, because of the rate of colonized patients increased over the years.

Keywords: multiresistence, microbiota, colonization, hospital, infection