Surveillance cultures might be useful for the presumption of causative pathogens of late-onset bacterial infection in patients with risk factors for the development of nosocomial bacterial infection" Ichikawa et al (2016).

Abstract:

Background: Surveillance cultures have been recommended for infection control of resistant bacteria in neonatal intensive care units (NICUs). However, the utility of surveillance cultures in the presumption of causative bacteria in late-onset bacterial infection has been controversial. The aim of the present study was to investigate the relationship between the causative pathogens of late-onset bacterial infection and the results of periodic surveillance cultures in a NICU.

Methods: A retrospective study was performed on 600 patients hospitalized in the NICU of a large metropolitan hospital from 2010-2013. The correspondence of the results of surveillance cultures with causative pathogens was analyzed in patients who developed late-onset bacterial infection.

Results: Staphylococcus species and enterobacterium were the most prevalent in the samples obtained from the oropharynx and rectum, respectively, during the investigation period. Twenty patients (3.3%) developed late-onset bacterial infection. The causative pathogens in 15 patients (75%) were also detected from the final surveillance cultures; these patients tended to be older than the other 5 patients (P = .003).

Conclusions: Surveillance cultures might be useful for the presumption of causative pathogens of late-onset bacterial infection in patients with risk factors for the development of nosocomial bacterial infection.

Reference:

Ichikawa, S., Hoshina, T., Kinjo, T., Araki, S. and Kusuhara, K. (2016) Efficacy of periodic surveillance culture in a neonatal intensive care unit in the presumption of causative pathogens of late-onset bacterial infection. American Journal of Infection Control. October 25th. .

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