Título: Group B *Streptococcus* in immunocompromised patients in Rio de Janeiro

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Resumo:

Streptococcus agalactiae, commonly referred as group B *Streptococcus* (GBS), is a major cause of neonatal sepsis and infections in pregnant women. However, the number of invasive infections in non-pregnant adults is growing. Elderly patients and those with chronic underlying conditions, such as diabetes mellitus or compromised immune defence, are at increased risk of invasion. In Latin America, studies on the epidemiology of *S. agalactiae* infections remain limited. To better understand the behaviour of *S. agalactiae* infections in our region, we conducted a retrospective study of *S. agalactiae* isolates collected in a Brazilian Reference Centre in Rio de Janeiro during 2010–2014. The isolates were identified by biochemical analysis and tested for antimicrobial susceptibility using the interpretive standards published by the Clinical and Laboratory Standards Institute (CLSI). In 2010–2014 a total of 263 *S. agalactiae* isolates were found in urine 55.5% (146/263), tracheal aspirates 10.3% (27/263), soft tissue 9.5% (25/263), lung 8.32% (22/263), blood 5.7% (15/263), catheter 1.9% (5/263), cerebrospinal fluid 0.38% (1/263), vaginal exudates 3.8% (10/263) and others 4.6% (12/263). In total 107 culture-positive cases of invasive infections were reported, tracheal aspirates (25.2%), soft tissues (23.4), lung (20.6%), blood (14%), catheter (4.7%), CSF (0.9%) and others (11.2%). Noninvasive infections of GBS (156 cases) were isolate from urine 93.6 % and vaginal exudates 6.4 %. Susceptibility to ampicillin or penicillin was 100% in all strains tested. The mortality was high occurring in 34.2% (90/263) of the cases: 2 children (2.2%), 42 adult (46.7%), and 46 elderly (51.1%). Our findings are consistent with the global trends described elsewhere, reinforcing the need for *S. agalactiae* control measures in our region. Enhancing our understanding of pathogenic mechanisms could aid in the identification of novel therapeutic targets or vaccine candidates that could potentially decrease morbidity and mortality associated with human infections.
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Palavras-chaves: *Streptococcus agalactiae*, immunocompromised patients, elderly.

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