TITLE: DISTRIBUTION OF *STREPTOCOCCUS AGALACTIAE* SEROTYPES AMONG PREGNANT WOMEN AND MENINGITIS CASES IN SALVADOR, BAHIA.

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ABSTRACT:

Streptococcus agalactiae or Group B *Streptococcus* (GBS) is an important cause of morbidity and mortality in adults, particularly those with underlying diseases and the elderly. In the mother can cause cystitis, pyelonephritis, endometritis, puerperal sepsis, chorioamnionitis or premature labor. In newborns, this agent causes neonatal pneumonia, septicemia, and meningitis. A total of 10 serotypes of GBS have been identified, serotypes Ia, Ib, II, III, IV, V, VI, VII, VIII and IX. The objective of this study was to investigate the distribution of GBS serotypes in cases of colonization in women with gestational age between 35th to 37th week and in cases of invasive disease. We selected 200 pregnant women from a private hospital (Hospital A) and 200 pregnant women from a public hospital (Hospital B) in Salvador from November 2012 to October 2013. The Prevalence of GBS carriage was 22.5% (45/200) and 28% (56/200) among the pregnant women from Hospital and B, respectively. Also, we analyzed 26 isolates from cases of meningitis identified at the Hospital Couto Maia between 1996 and 2013. The capsular type was deduced with multiplex PCR using specific primers for the types of CPS Ia, Ib, II, III and IV; and one specific primers for CPS types V, VI, VII, VIII. The serotypes identified in pregnant women at Hospital A were: Ia and II 24.4% (11/45) each, followed by serotype III, 15.6% (7/45), Ib and V, 13.3% (6/45) each, VII 6.7% (3/45) and IX 2.2% (1/45). In pregnant women at Hospital B the serotypes identified were: Ia 50.9% (28/55), followed by II and III, 14.5% (8/55) each, V 7.3% (4/55), serotypes Ib and IX 5.5% (3/55) each and serotype VII 1.8% (1/55). The serotype distribution among isolates from meningitis cases were: serotypes III 44% (11/25), followed by serotype Ia, 40% (10/25), IV, 8% (2/25) and V and Ia with 4% (1/25) each. The relatively high frequency of GBS colonization and the association of the major serotypes identified in the colonization episodes (Ia, II and III), with cases of meningitis (Ia and III), reinforces the importance of including the culture for study of GBS colonization in prenatal examination.

Keywords: *Streptococcus agalactiae*; colonization; invasive disease; serotypes.

Development agency: Fundação de Amparo à Pesquisa do Estado da Bahia; Laboratório de Análises Clínicas da Faculdade de Farmácia/UFBA.