

**FREQUENCY OF CARRIAGE AND DETERMINATION OF ANTIMICROBIAL SUSCEPTIBILITY
AND CAPSULAR TYPES OF *Streptococcus agalactiae* RECOVERED FROM PREGNANT
WOMEN ASSISTED IN NITERÓI/RJ**

Barros, R.R., Jobst, R.M.S., Souza, A.F., Luiz, F.B.O., Melo, A.L., Mondino, S.S.B.

UFF - Universidade Federal Fluminense (Rua Hernani de Melo 101, Centro, 24210-130, Niterói, RJ)

The aim of this study was to evaluate the frequency of *Streptococcus agalactiae* (Group B *Streptococcus*, GBS) carriage by pregnant women and to investigate antimicrobial susceptibility and capsular types of recovered isolates. A total of 114 vaginal/anal swabs was obtained from pregnant women assisted in the Pre-Natal Care Service of the Hospital Universitário Antônio Pedro, Universidade Federal Fluminense, between September 1, 2013 and August 31, 2014. This service is specialized in the care of selected groups, as teenagers and high-risk pregnant women. Swabs were cultured by standard techniques and positive cultures were submitted to species identification, antimicrobial susceptibility testing by disk-diffusion technique and capsular typing by multiplex-PCR. Pregnant women's ages varied from 16 to 45 years (mean 28 years). Screening was performed during 30-39 weeks of gestation, but 52.8% of them was done in the recommended period (35-37 weeks). Infections due to different etiologies were reported in 54.4% of the women, being bacterial urinary tract infection the most common (35.9%). Other bacterial infections counted 10.5%. GBS colonization rate was 6.1%. No significant difference was observed among colonized or non colonized pregnant women, regarding median age, instruction and previous gestation. Absence of any bacterial infection at the moment of the specimen collection was significantly associated with *S. agalactiae* carriage. Isolates were susceptible to ceftriaxone, clindamycin, erythromycin, levofloxacin, penicillin G and vancomycin. Tetracycline resistance was observed in 75% of the isolates. Capsular types found were Ia (50%) and III (50%). The high rate of bacterial infections calls attention, as such infections demanded antimicrobial prescription before GBS screening, what can explain, at least in part, the low frequency of *S. agalactiae* carriage. Bacterial isolates were susceptible to antimicrobials recommended to neonatal infection prophylaxis. However, the capsular types found are among the most associated with such infections, which corroborates the need of the continuous screening of GBS carriage in order to prevent neonatal streptococcal infection.

Keywords: pregnant women, *Streptococcus agalactiae*, carriage, antimicrobial agent, capsular type.

Financial support: Pró Reitoria de Pesquisa, Pós-Graduação e Inovação, Universidade Federal Fluminense.