Group B Streptococcus colonization in HIV infected pregnant women in the Hospital Professor Doutor José Aristodemo Pinotti between 2000 and 2015


Abstract
The Group B streptococcus (GBS) is one of principal causes of neonatal sepsis and neonatal death by the vertical route, however there are few studies about the HIV infection and GBS in pregnancy. The aim of this study is to evaluate the GBS colonization in HIV infected pregnant women in the prenatal care Pré-natal Especializado em infecções do Centro de Atenção Integral à Saúde da Mulher (PNE) – Caism – Unicamp. This is an observational study cross-sectional survey, enrolling medical records and rectovaginal swab for GBS from the patients of prenatal care PNE between 2000 and 2015. From all the variables of this study, the population who did not collect the rectovaginal swabs had fewer use of psychoactive drugs and tobacco (p < 0.0001). The analyses comparing the groups who collected the rectovaginal swabs have not shown statistically difference (p > 0.18). This study revealed no difference on the evolution of pregnancy between HIV infected women with GBS positive culture (PC), however the neonatal death in PC group must be considered as very important data.

Key words: Pregnancy, Group B Streptococcus, HIV infection

Introduction
The Group B streptococcus (GBS) is one of principal causes of neonatal sepsis and death by the vertical route, very prevalent in pregnant women of all world. The colonization is the focus of a several studies, however the association with women with HIV disease. The aim of this study is to evaluate the GBS colonization in pregnant women living with HIV who have been included as patients in the PNE – Caism – Unicamp, a prenatal care, between 2000 and 2015, determining three secundary objectives: the frequency of GBS colonization, the variables associated with GBS and the frequency of neonatal disease in newborns. This is an observational study cross-sectional survey with 816 HIV infected pregnant women.

Results and Discussion
From all the patients of prenatal care, a pair of combined rectovaginal swabs were collected from 228 pregnant women. Of this total, 61 were positive cultures (PC) and 167 were negative cultures (NC)1. From all the variables of this study (maternal age, maternal education, neonatal pathology, birth weight, Five-minute Apgar, Capurro, HIV Antiretroviral drug therapy (HADT), maternal comorbidities, CD4 count cells), the population who did not collect the combined rectovaginal swabs had fewer use of psychoactive drugs and tobacco (p < 0.0001), thus lower prevalence of use of HADT before the pregnancy (p < 0.0001). Comparing the groups PC and NC, there was a statistically significantly difference between the average birth weights (2716 g for NC, 2911 g for PC, p < 0.05), which might be associated with the higher frequency of use of psychoactive drugs and tobacco in NC group. The analyses of the all other variables have not shown statistically difference (p > 0.18)2. However, there was a neonatal death in the CP group.

Conclusions
This study revealed no difference on the evolution of pregnancy between HIV infected women with GBS positive culture. However, the neonatal death in PC group must be considered as a very important data, which might be considered on trial and prophylaxis of this agent during in prenatal care.