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Polymerase chain reaction as screening method for group B *Streptococcus* in late pregnancy

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Objective: The present study aims to use a rapid real-time polymerase chain reaction (PCR) assay in order to determine the prevalence of maternal group B streptococcus (GBS) colonization in third trimester of pregnancy.

Methods: This prospective study reviews 70 healthy women with term pregnancies who were consecutively admitted to the study center for routine prenatal care from June 2012 to December 2012.

Results: The intrapartum GBS colonization rate was 15.7% by PCR technique. Perinatal complications including abortus imminens, intrauterine growth restriction, preterm labor, premature rupture of membranes, preterm birth, meconium stained amniotic fluid and chorioamnionitis were significantly more frequent in women with GBS positivity (respectively 0.029, 0.044, 0.029, 0.001, 0.023, 0.011, 0.023). Puerperal fever was significantly more frequent in women who were GBS positive ($p=0.023$). The need for neonatal intensive care unit and neonatal pneumonia were significantly more frequent for the neonates that were born to women with GBS positivity (respectively $p=0.002$ and $p=0.023$).

Conclusions: The real-time PCR assay can be defined as an accurate test to identify the GBS carriers at the third trimester of pregnancy. This easily applicable tool could enhance the exact identification of candidates for chemoprophylaxis, including women carrying a risk for PROM or preterm labor.