

**Prevalence and capsular-polysaccharide type distribution of colonizing group B streptococci (GBS) isolated from recto-vaginal samples in pregnant women in Hanoï, Vietnam**

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**Background:** The study was organized by the Belgian National Reference Center (NRC) for *Streptococcus agalactiae* or GBS, and carried out in Vietnam. The aim of the study was to determine the prevalence of GBS colonization among pregnant women in Hanoï and to characterize the capsular-polysaccharide (CPS) type of the isolated strains.

**Methods:** For a 2-months period in 2015, 888 recto-vaginal swabs were collected in Bach-Mai-Hospital from pregnant women at 35-37 weeks’ gestation and were cultured for detection of GBS. Strains were stored and transferred to the Belgian NRC for further characterization. CPS-typing was performed by both latex agglutination and PCR (Poyart, 2007; Kong, 2008).

**Results:** Among the 888 swabs**,** 111 were positive for GBS, that is a prevalence of colonization of 12.5%. A total of 90 strains were available for typing: 91,11% could be serotyped by latex agglutination and all the strains, including the 8 phenotypically non-typable strains, were successfully genotyped. CPS type V was the most prevalent (36.7%) followed by CPS types Ib (25.6%), III (21.1%), VI and VII (8.9% and 4.4%). CPS type II was found twice and serotype Ia was found once. CPS types IV, VIII and IX weren’t present in this population.

**Conclusion:** With predominance of types V, Ib and III, this distribution of CPS-types of GBS colonizing pregnant women in Hanoï, Vietnam, differs from distributions described in Europe and in o Asian countries. This study provides useful information for the development of a universal vaccine that could contribute to improve the prevention of neonatal GBS infections.