

**Update of the characteristics of Group B Streptococci (GBS) colonizing pregnant women in Belgium: capsular-type distribution, pili characterization, antimicrobial susceptibility profile and Multiple Locus Sequence Types.**

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**Aim:** Improving knowledge and characterization of GBS strains colonizing pregnant women in Belgium.

**Methods:** In 2013, collection of 387 strains of GBS from 80 laboratories participating in a national survey among pregnant woman. For each strain, determination of capsular-polysaccharide type agglutination and PCR, of pili-type by PCR and of antimicrobial susceptibility by disk-diffusion, broth-microdilution and detection of resistant genes by PCR. For serotype III strains, determination sequence-type by Multiple-Locus Sequence-Typing (MLST).

**Results:** Serotype III was the most prevalent (28.5%) followed by serotypes V, Ia, II, IV and Ib (20.4%, 19.9%, 17.8%, 7%, 5.4%). Serotypes VI, VII and IX were found each once. All strains remained susceptible to penicillin (MICs: 0.03-0.125 mg/L) and other beta-lactams tested; 28.7% were resistant to erythromycin and 26.7% to clindamycin. With regards to pili, all 387 strains harboured one the PI-2 variants alone or in combination and 70.3% contained PI-1. The 110 serotype III isolates were resolved into 18 STs. The most common were ST-17 (35.5%) followed by ST-19 (30%) and ST- ST-27, ST-23 (<=5%).

**Conclusion:** Among GBS from colonized pregnant women in Belgium: capsular-type and pili distributions, and MLST profile among type III strains were quite similar to reported data from Europ and USA during the last decade. As showed in this study, penicillin remains the first line drug of choice. On the contrary, resistance rates against macrolides/lincosamide, has reached a plateau since a decade, but it is noteworthy to notify the emergence of strains with isolated resistance to clindamycine.