

## **GBS: Screening, diagnosis and clinically relevant antimicrobial resistance**

In the setting of a maternal GBS-screening program and successful implementation of the strategy, efforts to improve screening for GBS status remain important. Critical factors that influence the accuracy of detecting GBS maternal colonization are the choice of culture media, the body sites sampled, and the timing of sampling. The evolution of the different culture options to improve the GBS-screening strategy will be reviewed.

Despite efforts related to sampling and culture procedures, false-negative GBS-screening contributing to continuing EOGBS cases and false-positive screening leading to unnecessary IAP, occur. As GBS carriage is highly variable, the predictive values of GBS antenatal cultures are not always good predictors of the maternal GBS status at presentation for delivery. Rapid non-cultural GBS screening methods have been developed: antigenic tests are not sensitive enough to replace antenatal screening cultures but available real-time PCR have fared better in the detection of GBS. Real-time PCR tests could improve effectiveness of the screening-based strategy and lead to a further reduction of the incidence of EOGBS disease. However questions of costs and logistics remain unanswered.

Either for therapy or for intrapartum chemoprophylaxis, penicillin G for its bactericidal activity and narrow spectrum, remains the agent of choice. But in the true penicillin allergic patients, clindamycin or erythromycin have been recommended as alternative drugs. However, probably as a consequence of the important use of macrolides, related drug resistance among streptococcal isolates is currently recognized in many countries. Epidemiology of resistance to antimicrobial agents will be presented.