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Abstract (poster session)

**Prevalence of *Streptococcus agalactiae* colonisation in pregnant women and antimicrobial resistance profiles**

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Background: Group B *Streptococcus* (GBS) is a cause of early neonatal morbidity and mortality. Maternal vaginal colonization with GBS is a risk factor for invasive disease in the first week of newborn life. Objectives: To study the prevalence of vaginal colonization by GBS in pregnant women and to determine the antibiotic susceptibility pattern of the isolates. Material and Methods: During a two year period from October 2009 through October 2011, 2793 pregnant women attending the department of Obstetrics and Gynecology of "Alexandra" Hospital of Athens were examined for GBS colonization as a part of routine culture of vaginal swabs for common bacterial and fungal pathogens. A vaginal swab obtained in Stuart transport medium was cultured onto Columbia CNA blood agar with colistin and nalidixic acid for *Streptococcus* isolation. A rapid latex agglutination test was performed for identification of Lancefield A, B, C, D, F and G group antigens of streptococci. Antibiotic susceptibility testing was performed by disc diffusion technique on Mueller-Hinton agar with 5% sheep blood according to CLSI recommendations and MICs were determined by Etest (AB Biodisk, Solna, Sweden). Results: During the study period 93 (3.33%) out of 2,793 pregnant women were found positive for GBS. Susceptibility testing of 93 isolates to penicillin, ampicillin, erythromycin, clindamycin, tetracycline, levofloxacin, vancomycin and linezolid showed the following resistance rates: 0% (MICs of 0.094 to 0.12 µg/ml), 0% (MICs of 0.023 to 0.032 µg/ml), 26.88% (MICs >256 µg/ml), 19.36% (MICs >256 µg/ml), 92.48% (MICs of 8 to 12 µg/ml), 3.23% (MICs of 12 to 24 µg/ml), 0% (MICs of 0.75 to 1 µg/ml), and 0% (MICs of 0.75 to 1.5 µg/ml) respectively. The susceptible isolates to penicillin can be considered susceptible to all beta-lactams (cefazolin cephalothin, cefuroxime, ceftriaxone, cefotaxime, cefepime, imipenem) according to CLSI guidelines. Inducible clindamycin resistance was not detected by D-test. Conclusions: (a) The prevalence of GBS in pregnant women of our study is low. (b) Penicillin or ampicillin remain the drugs of choice for intrapartum antibiotic prophylaxis as isolates with increasing MICs to both agents were not detected. (c) Clindamycin, the drug of choice for penicillin-allergic women at high risk for anaphylaxis, demonstrates a significant resistance rate. (d) GBS show an unusually very high resistance rate to tetracycline.