

Frequency and Drug Resistance of Group B Streptococcus in Pregnant Women in Markazi Province, Iran

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Abstract

Background and Objective: Group B streptococcus is one of the agents leading to infantile blood infection and meningitis as well as aggressive infections in pregnant women. The vast use of antibiotics in order to prevent from the diseases caused by this bacterium has led to some concerns about the emergence of drug resistance in Group B streptococcus. Thus, we aimed to investigate Group B streptococcus drug resistance patterns to aid appropriate drug prescriptions.

Material and Methods: The study was conducted on 268 pregnant women. Having been transferred to Todd Hewitt broth, the samples were cultured on blood agar and the identity of Group B streptococcus was confirmed through biochemical tests (gram stain tests, the catalase test, CAMP, and sodium hippurate hydrolysis).

Results: Of 268 samples, 14 (5.2 percent) showed positive Group B streptococcus culture. All cases (100 percent) were resistant to penicillin, eight (57.15 percent) to erythromycin, 13 (92.2 percent) to clindamycin, three (7.1 percent) to Cefazolin, seven (50 percent) Ceftizoxime and four (28.57 percent) were resistant to Cefotaxime. Three (21.4 percent) were semi-sensitive toward Cefazolin. No resistance was observed toward ampicillin or Vancomycin.

Conclusion: The rate of B streptococcus drug resistance to various antibiotics has increased in Iran.

Keywords: Streptococcus Group B, Drug Resistant, Pregnant Women, Markazi Province