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*Acinetobacter baumannii*의 항생제 내성유형과 PCR을 이용한  
plasmid성  $\beta$ -lactamase 유전자의 검출

문지영, 김영희, 임은경, 오양효, 김영부

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Detection of plasmid-mediated  $\beta$ -lactamase genes in *Acinetobacter baumannii* by Polymerase Chain Reaction

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**Abstract**

*Acinetobacter baumannii* strains have gained increasing nosocomial significance. They are compounded by the widespread resistance of most hospital isolates to the major groups of antibiotics.

A total of sixty-six *A. baumannii* strains were isolated from different clinical isolates in PNU hospital between March and August 1999. We were analyzed antimicrobial susceptibility, DNA pattern and plasmid-mediated  $\beta$ -lactamase genes by PCR method.

Most strains were resistant to cephalothin (96.97%), and the resistant rate to other antibiotics were more than 60%. But most strains were susceptible to imipenem (92.42%). In the antibiotic resistant patterns, 9 kinds of multiple resistant patterns of *A. baumannii* isolates were detected. The highest resistant pattern was cephalothin-ampicillin-cefamantole-cefoxitin-gentamicin-cefotaxime-sulfamethoxazole-ciprofloxacin type (54.5%). Forty-three (65.15%) were resistant to at least five  $\beta$ -lactam antibiotics. This isolates had the same plasmid profile, with 2 plasmids. However, only twenty-six of forty-three isolates appeared TEM-type  $\beta$ -lactamase.

Key Words : antibiotic resistant, plasmid DNA,  $\beta$ -lactamase, PCR