***Acinetobacter* spp as Emerging Pathogen in Neonatal Septicemia**

Sir,

Gram negative bacilli are important agents causing neonatal sepsis. Changing bacterial flora and emergence of resistant strains further increase the problem. *Acinetobacter* spp. are usually commensal, but they are emerging as important opportunistic pathogens because they are rapidly evolving towards multidrug resistance and are often involved in various nosocomial infections that can be severe, such as bacteremia, meningitis, or pneumonia¹.

In the present study, undertaken over a period of six months (Jan-June 2007) at Pt. B.D.S. PGIMS, Rohtak, a total of 1113 blood cultures were done in clinically suspected cases of septicemia in newborns and infants from pediatric ward and NICU. Organisms were identified by standard methods.² *Acinetobacter* spp. were Gram negative coccobacilli, strictly aerobic, oxidase negative, non-motile and catalase positive. Species differentiation of *Acinetobacter* was done on the basis of glucose oxidation, gelatin liquefaction, hemolysis, growth at 37°C and 44°C, susceptibility to penicillin and chloramphenicol discs.

Antimicrobial sensitivity tests of the isolates were performed by the disc diffusion method of Kirby-Bauer³. Imipenem resistant strains were screened for the presence of Metallo-beta-lactamases (MβLs) by imipenem-EDTA disk method.⁴ From a total of 1113 blood culture, 122 were culture positive. Out of which *Acinetobacter* spp. were isolated in 21 cases (17.21%). Species differentiation of isolates showed a predominance of *A. baumannii* complex (*Acb* complex) 76.19% while *A. lowffi* and *A. haemolyticus* had an isolation rate of 14.28% and 9.5% respectively.

In the present study, meropenem, doxycycline, and amikacin showed highest sensitivity at 80.9%, 80.9% and 76.1% respectively. Moderate sensitivity was seen to ceftazidime (66.6%) cotrimoxazole (61.9%) and amoxycylav (52.3%).

Poor sensitivity was seen with ofloxacin (42%), ciprofloxacin (38%) and gentamicin (22.9%). Four isolates (19.04%) were found to be imipenem resistant. Of these one isolate (25%) was MβL producer.

The incidence of *Acinetobacter* septicemia in the present study was 17.21%, which is comparable with

the results of Mondal *et al*⁵ (15.2%). However, incidence was higher than that reported by Vinodkumar and Neelagund.⁶ The most important nosocomial acinetobacters belong to *Acb*-complex.⁷ The present study also identified more strains belonging to the *Acb*-complex than other phenotypes. One isolate was MβL producer and was found resistant to aminoglycosides and fluoroquinolones, creating a serious problem for the choice of therapy.

To conclude, we feel that the significance of *Acinetobacter* spp. has increased in the last decade, as a human pathogen because of the high potential of this genus to develop antibiotic resistance. Therefore, a coordinated effort is needed for presumptive identification of *Acb*-complex and vigilant detection of MβL producing *Acinetobacter*s for strict infection control of these isolates which will contribute to prevent further spread of resistance.

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