Acinetobacter spp. - An Emerging Pathogen in Neonatal Septicemia in Amritsar

Dear Editor,

Septicaemia remains a significant cause of morbidity and mortality in the newborns in the developing countries. According to National Neonatal Perinatal Database (2000) in India, the incidence of neonatal septicemia is 24/1000 live births. Changing bacterial flora and emergence of resistant strains further aggravate the problem. Acinetobacter spp. have emerged as important nosocomial pathogens. They are ubiquitous in nature and are highly resistant to commonly used antibiotics. Blood samples from 400 suspected neonatal septicaemia cases were cultured from Feb 2003 - Dec 2004. Organisms were identified by standard methods and antimicrobial susceptibility testing was done by Kirby Bauer disc diffusion method. One hundred and eighty seven (46.8%) neonates were positive in blood culture and Acinetobacter spp. were isolated from 23 (12.3%) of which 13 were A. baumannii and 10 were A. lwoffi. Eight were term babies and 15 were preterm. 17 babies weighed less than 2.5 kg. whereas 6 weighed 2.5 kg. or more. Associated risk factors included prolonged rupture of membranes (4), perinatal asphyxia (5), Neonatal jaundice (2), congenital abnormalities (1) and IUGR (2). Babies born in hospital had higher isolation of Acinetobacter spp. (16/23). This might be because of multidrug resistant strains jerking in the hospital environment. All the 23 isolates were resistant to two or more antibiotics, most notable being resistance to ampicillin (82.5%), cephalaxin (69.6%), gentamicin (66.5%) and cefotaxime (47.8%) was noted. The strains were sensitive to amikacin (82.6%), ciprofloxacin (73.9%) and piperacillin (69.6%).

The incidence of Acinetobacter septicaemia in this study is 12.3%, which is comparable with the results of Mondal et al (15.2%). However, the incidence is higher than that reported Vinod kumar and Neelagund (8.3%).

Since all babies had clinical features suggestive of septicemia, the organism was considered to be significant. The present study highlights Acinetobacter spp. as important pathogen of nosocomial septicemia neonatal. Rational antibiotic use along with implementation of infection control policies are required for control of such infections.

References

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