
Aminoglycoside nephrotoxicity

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The aminoglycoside antibiotics (gentamicin, tobramycin, amikacin and netilmicin) are widely prescribed in clinical medicine to treat serious infections (Bennett et al., 1982). Nephrotoxicity is a major adverse effect of aminoglycoside antibiotic agents. This is a comparative study of nephrotoxicity of these drugs in the hope that we can choose or recommend the best. This study was conducted upon 35 patients divided into 4 groups according to the aminoglycoside used. Blood urea and serum creatinine were measured before treatment and on the third, sixth and tenth day of the treatment. Creatinine clearance was measured before treatment and on the tenth day of the treatment. In this study, we found no wide variations in nephrotoxicity between these aminoglycosides. The nephrotoxicity of aminoglycosides is preventable and reversible. So, we advise

- 1] Adjusting the dose to be the minimal of therapeutic effect.
- 2] Adjusting the duration of treatment not to exceed ten days.
- 3] Patients should be well hydrated during therapy.
- 4] Monitoring the nephrotoxicity of the patient by measuring serum creatinine on third day and toxicity must be considered if it exceeds 31%.