

A pharmacological update of nephrotoxic drugs- Tasneem Sandozi-Dubai Medical College

Tasneem Sandozi

Dubai Medical College, UAE

Tetracyclines & Glycylcyclines: Tetracycline, Oxytetracycline, Minocycline, oxycycline, Tigecycline The catabolic effect of tetracyclines aggravates azotemia in patients with renal disease Fanconi syndrome: Outdated tetracyclines cause toxic effects on proximal renal tubules

Amphotericin B: It is a broad spectrum antifungal drug having the broadest spectrum of activity

Formulations: Four formulations available to make it suitable for intravenous administration as it is insoluble in water.

C-AMB: Amphotericin B is formulated with bile salt deoxychole Amphotericin B colloidal dispersion (ABCD), it contains equal amounts of amphotericin B and cholesteryl sulphate, Liposomal Amphotericin B (L-AMB), Amphotericin B is incorporated within unilamellar, liposomal vesicle formulation, Amphotericin B lipid (ABLC) It complex is a complex of two phospholipids Nephrotoxicity of AMP-B formulations Serum creatinine doubles by 57% during therapy.

Except C-AMB all three reduce risk of active kidney disease: Azotemia occurs in 80% of patients who receive C-AMB for deep mycosis ABLC has been observed to be more nephrotoxic than L-AMP-B in patients at high risk for nephrotoxicity Nephrotoxicity of AMP-B formulations: Serum creatinine doubles by 57% during therapy Lipid formulations decrease nephrotoxicity Except C-AMB all three reduce risk of active kidney disease Azotemia occurs in 80% of patients who receive C-AMB for deep mycosis ABLC has been observed to be more nephrotoxic than L-AMP-B in patients at high risk for nephrotoxicity In adults with normal renal function prior to treatment permanent functional impairment is uncommon even though permanent histological changes occur during short courses of C-AMB: Renal tubular acidosis & renal wasting of potassium & magnesium may also be seen several weeks after therapy Supplemental potassium is required in 1/3rd of the patients on prolonged therapy

Note : This work was presented in 3rd World Kidney Congress, which was scheduled in October 08-10, 2018 at Dubai, UAE.