Reno-protective effects of ursodeoxycholic acid against gentamycin-induced nephrotoxicity through modulation of NFκB, eNOS and caspase-3 expressions.


Abstract:

Gentamicin (GNT) is a potent aminoglycoside antibiotic widely used to treat life-threatening bacterial infections. We aim to investigate the potential protective effect of ursodeoxycholic acid (UDCA) against GNT-induced nephrotoxicity. In this study, 24 male Wistar rats were used and randomly divided into four groups of six animals each. Control group received 0.5% carboxymethyl cellulose orally for 15 days, GNT group received GNT 100 mg/kg/day ip for 8 days, UDCA group received UDCA orally for 15 consecutive days at a dose of 60 mg/kg/day suspended in 0.5% carboxymethyl cellulose and UDCA-pretreated group received UDCA orally for 7 days then co-administered with GNT ip for 8 days at the same fore-mentioned doses. Serum levels of kidney function parameters (urea, creatinine, uric acid and albumin) were measured. Renal tissues were used to evaluate oxidative stress markers; malonaldehyde (MDA)

Published In:

cell and tissue research, NULL, NULL