

Abstract (600 word limits)

Ameliorative effect of Phoenix dactylifera on adverse effects of Linezolid in rats

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Linezolid is one of the oxazolidinone anti-biotics that's used to treat methicillin resistant staphylococcus aureus (MRSA) & vancomycin resistant staphylococcus aureus VRSA and was discovered in the 1990s and first approved for use in 2000. This study was aimed to investigate the adverse effects of linezolid on bone marrow, brain & kidney damaging effect of linezolid and counteracting these adverse effects using Phoenix dactylifera methanolic extract in rats. It was found that oral administration of linezolid (100 mg/kg body weight) given for 14 successive days induced a significant decrease in haemoglobin content (7.88 ± 0.18 g/L) on the first day post-treatment, significant increase in serum urea (59.75 ± 0.85) & serum creatinine (1.89 ± 0.04) on the 14th day post-treatment and induced mild brain damage on the first day post treatment. The concurrent oral administration of Phoenix dactylifera methanolic extract (1000 mg/kg body weight) and linezolid (100 mg/kg body weight) for the same period corrected the damaging effects of linezolid of the haemoglobin content, urea, creatinine & brain condition of treated rats. It was concluded that methanolic extract of phoenix dactylifera clearly ameliorated these damaging effects of linezolid.

Key words: - Phoenix dactylifera, Linezolid, urea, creatinine, brain and bone marrow.

Biography (200 word limit)

Mahmoud Said from Pharmacology Department, Faculty of Veterinary Medicine, Zagazig University and has his knowledge in monitoring and counteracting the adverse effects of anti-biotic by using different antioxidant natural plants to reduce the mortality rate and health hazards resulting from antibiotic use. He has five years of experience in research, teaching and administration in hospital. His current position is director of the blood bank and he has experience in performing serological tests.

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