

## Evaluation of protective and curative role of *MoringaOleifera* aqueous extract in dimethylbenz(a)anthracene (DMBA) actuated - nephrotoxic rats

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*Moringaoleifera* (MO) is a tropical drumstick tree whose various financial applications are stirring developing global interest. Kidneys vulnerable to damage by poisons, contamination, invulnerable responses and ischemia. Intense renal failure is a continuous complexity of basic disease particularly in the inpatient setting. The point of the present study was to assess the protective and curative effect as well as chemopreventive effectiveness of *M.oleifera* extract against dimethylbenz(a)anthracene (DMBA) induced nephrotoxicity in rats. Rats were divided into five groups as follows Group (1) Control rats got 1 ml oral saline daily. Group (2) Renal failure induced group. Group (3) Healthy rats got *M oleifera* in a dose of 200mg/Kg daily. Group (4) Rats orally treated with *M oleifera* in a dosage of 200 mg/kg body weight 28 days subsequent to accepting intraperitoneally dose of (DMBA). Group (5) Rats orally treated with *M oleifera* in a dosage of 200 mg/kg body weight 14 days before and 14 days after getting intraperitoneally dose of (DMBA). DMBA induction inspired a huge acceleration in parameters like serum urea, creatinin, protein, electrolytes, cyctatin c and  $\beta 2$  - Microglobulin, add up to and direct bilirubin level and MDA, with a consumption of cancer prevention agent catalysts to be specific SOD, CAT and NO. The helpful adequacy of *Moringaoleifera* concentrate was seen as far as standardization of changed renal oxidative stress parameters and electrolytes and both cyctatin c and  $\beta 2$  - Microglobulin. Explored parameters were restored, about to the ordinary qualities, after *M oleifera* extract treatment. These outcomes proposed that *M oleifera* concentrate could act against DMBA-impelled kidney damage in rats by a system identified with its cell reinforcement properties. So also, the oral treatment of *M oleifera*, as a therapeutic effect created comparable changes to those when *M oleifera* was utilized as a defensive operator, however to a lesser degree.

**Key words:** *MoringaOleifera*, DMBA, renal failure, kidney functions, oxidative stress.

### Biography:

Amal Hamza joined the Biochemistry Department at King Abdulaziz University (KAU) in Saudi Arabia as an Associate Professor, on 2011. Previously, She worked as a Teaching Assistant, and as Assistant and Associate professor at the Department of Biochemistry and Nutrition, Ain-Shams University, in Egypt since 1996. She have over than 20 years of teaching and research experience. She developed and taught undergraduate classes in biochemistry and nutrition, and served on thesis and dissertation committees. Her research interest focused on studying the molecular and biochemical mechanism of natural products and essential nutrients in management and ameliorating several diseases.