AMELIORATIVE POTENTIALS OF A COMBINATION OF FENUGREEK AND A-TOCOPHEROL ON CADMIUM INDUCED TESTICULAR TOXICITY: AN ULTRASTRUCTURAL STUDY

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Background. The current study aimed to elucidate the protective role of combined fenugreek and α-tocopherol against cadmium (Cd) induced histopathological changes in the testes.

Methods. Thirty adult male albino rats divided into three equal groups 10 rats each. Group I is the control group. Group II received 5 mg/kg/day cadmium chloride. Group III received 5 mg/kg/day cadmium chloride and 150 mg/kg/day fenugreek and 100 mg/kg/day of α-tocopherol. The treatment of all groups was done by oral gavage for 60 consecutive days. The testes were removed and subjected to histopathological and ultrastructure study.

Results. Rats exposed to cadmium showed severe histopathological changes in the testicular spermatogenic series, many vacuoles and multinucleated giant cells. Treatment with fenugreek and α-tocopherol partially improved the morphological changes, reduced tissue damage and rebuilt of the spermatogonia layer.

Conclusion. Fenugreek and α-tocopherol might represent a promising medicinal combination to ameliorate the toxic effects of cadmium exposure.