

**ISOPROTERENOL- INDUCED MYOCARDIAL TOXICITY
and the PROPHYLACTIC ROLE of GINKGO BILOBA in
ADULT MALE ALBINO RAT: MORPHOLOGICAL and
ULTRASTRUCTURAL STUDY**

Thesis

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By

Shimaa Aly Rouby Mostafa

(M.B., B.Ch.)

Faculty of Medicine
Fayoum University

Supervised by

Prof.Dr. Safwat Wadie Gerges

Professor of Anatomy and Embryology
Faculty of Medicine
Cairo University

Dr. Maha Khalid Abd-El Wahed

Assistant Professor of Anatomy and Embryology
Faculty of Medicine
Fayoum University

Dr. Mogeda Mahdy Nasralla

Assistant Professor of Anatomy and Embryology
Faculty of Medicine
Cairo University

**Department of Anatomy and Embryology
Faculty of Medicine
Fayoum University**

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Abstract

Seventy adult male albino rats (Sprague Dawley) weighing 180-200 g were used in this study. They were divided into seven groups, ten rats each; group **I** (normal control) received nothing, group **IIA, B** (sham control) ingested (GB) tablets (200 mg/kg, BW) orally daily for 21 days, group **IIIA, B** (ISO treated group-ISO withdrawal group) injected Isoproterenol (10 mg/ Kg, BW) subcutaneously on the 20th and 21st day, group **IV A, B** (GB and ISO treated groups): ingested GB daily for 21 days, thereafter ISO s.c on the 20th and 21st day. Then sacrificed 24 hours after the second ISO dose, group **I, IIA** were sacrificed 24 hours after the last dose of GB; **IIIA, IVA**, were sacrificed 24 hours after the second dose of ISO; **II B** were sacrificed 21 days after the last dose of GB, **IIIB, IVB** groups were sacrificed 21 days after the second dose of ISO. Heart specimens were processed for light and electron microscopic examination.

Histological examination of rat's heart section induced myocardial necrosis with isoproterenol in the form of focal lesions in many sections and fragmentation of muscle fibers. Ginkgo biloba pretreated animals revealed minimal myocardial injury when compared to ISO-treated hearts indicating the cardioprotective effect of GB.

Key Words : Ginkgo biloba; Cardio prophylactic; Antioxidant activity; Isoproterenol.