Faculty of Veterinary Medicine
Department of Cytology and Histology

Effect of long term cell phone use on the testes of adult male Wistar rat

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For the degree of M.V.Sc in

(Cytology& Histology)

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2015


بسم الله الرحمن الرحيم

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ABSTRACT

In the present study, we examined the effect of mobile phone on the testes of 20 male Wistar albino rat using light and electron microscope. Moreover, we measured some parameters including testosterone level in blood, semen analysis and changes in some tissue enzymes. Exposure to mobile phone radiation for 2hours /day for 3 months lead to wide range of alterations in the light and electron microscopic structure of the testes of the exposed group compared to the control group. As well, it leads to decrease in testosterone, semen parameters and antioxidant parameters in comparing to control group. Therefore, long- term exposure to mobile phone radiation can affect male fertility.

Key words: Mobile phone, testes, male fertility, Wistar rat, histological examination, ultrastructure, testosterone, semen and antioxidant.

ACKNOWLEDGEMENT

First of all, thanks to **"ALLAH"** who provides me, with his unlimited generosity, the knowledge, which I hope to be beneficial to people and provided me the strength to complete this work.

I would like to express my sincere gratitude and deep appreciation to ***Prof. Dr. Gehad Abd El Fatah El-Bargeesy,*** *Professor of Cytology& Histology, Faculty of Veterinary Medicine, Cairo University,* who gave me the honor of working under his remarkable supervision that makes me really fortunate. He was kind to offer me much of his valuable time, sincere advice and valuable experience.

I would like to express my deepest thanks to ***Prof Dr. Hany Ahmed Mahmoud El-Habback,*** *Professor of Cytology& Histology, Faculty of Veterinary Medicine, Cairo University,* for his extra ordinary help, remarkable advice, close supervision, unimaginable efforts and continuous encouragement.

Also, I have the greatest pleasure to express my deepest gratitude to ***Dr. Abd El-Aleem Abd El-Aleem El-Saba,*** *Assistant professor of Cytology& Histology, Faculty of Veterinary Medicine, Cairo University* for his faithful help without which I would not have achieved any progress in my work.

Sincere thanks to ***Dr. Mohamed Fathy Mohamed Abd-Alla,*** *lecturer of Theriogenlogy, Faculty of Veterinary Medicine, Cairo University* for his kind help in semen analysis.

Ola Raouf Hassen

2015

DEDICATION

To my husband

I am greatly indebted to my husband Dr. Mostafa for his continuous help, support and kind encouragement.

To my family

I owe profound gratitude to my father soul, the first to teach me and to my beloved mother, for her prayers to me.

And To my lovely kid

I hope for him a bright future.

CONTENTS

LIST OF FIGURES

42	**Colored photomicrograph of cross section in testis of exposed rat showing homogenate and deeply acidophilic mass seen toward the lumen of the seminiferous tubules. H&E stain X 1000.**	**82**
43	**Electron micrograph of testis of exposed rat showing primary spermatocytes with destruction in the cytoplasmic organelles, the nucleus showed slightly disappearance of the nuclear envelope with lyses of the chromatin material. Uranyl acetate- lead citrate stain X 12,000**	**83**
44	**Colored photomicrograph of cross section in testis of exposed rat showing early spermatids with the chromatin condensed only on the periphery of the nucleus. H&E stain X 1000.**	**84**
45	**Colored photomicrograph of cross section in testis of exposed rat showing early spermatids with abnormal nuclei coalesce together formed rosette shape. H&E stain X 400**	**85**
46	**Colored photomicrograph of cross section in testis of exposed rat showing early spermatids completely lost their cellular boundaries with nuclear lysis. H&E stain X 1000**	**86**
47	**Colored photomicrograph of cross section in testis of exposed rat showing the late spermatids with fragmented nuclei. H&E stain X 1000.**	**87**
48	**Electron micrograph of testis of exposed rat showing early spermatids with large cytoplasmic vacuolations and notice the thickening of some nuclear envelope. Uranyl acetate-lead citrate stain X 6,000.**	**88**
49	**Colored photomicrograph of cross section in testis of exposed rat showing seminiferous tubule with reduction in thickness of the epithelium with few spermatogenic cells and lysis of spermatozoa. H&E stain X 400.**	**89**
50	**Colored photomicrograph of cross section in testis of exposed rat showing seminiferous tubules showed sever degeneration and necrosis and lost the normal cellular orientation. H&E stain X 1000.**	**90**
51	**Colored photomicrograph of cross section in testis of exposed rat showing some newly formed spermatozoa appeared normal. H&E stain X 1000.**	**91**