شبكة المعلومات الجامعية

بسم الله الرحمن الرحيم

شبكة المعلومـــات الجامعية

التوثيق الالكتروني والميكروفيلم

شبكة المعلومات الجامعية

جامعة عين شمس

التوثيق الالكتروني والميكروفيلم

﴿ قَسَـــم ﴾

نقسم بالله العظيم أن المادة التي تم توثيقها وتسجيلها
علي هذه الأفلام قد اعدت دون آية تغيرات

يجب أن

تحفظ هذه الأفلام بعيداً عن الغبار

في درجة حرارة من 15 – 20 مئوية ورطوبة نسبية من 20-40 %

To be kept away from dust in dry cool place of
15 – 25c and relative humidity 20-40 %

بعض الوثائق الأصلية تالفة

بالرسالة صفحات

لم ترد بالأصـــل

ALTERATION OF SOME BASEMENT MEMBRANE PROTEINS IN THE BASAL CELL CARCINOMA AND SQUAMOUS CELL CARCINOMA

THESIS

Submitted for the Partial Fulfillment of Master Degree

In

Dermatology and Andrology

By

Sherin Ahmed Aly El-Sayed

(M.B.,B.Ch.,)

Supervisors

Prof. Dr.

Fatma A. Abd Rabboh

Prof. and Head of Department of Dermatology & Andrology

Faculty of Medicine

Tanta University

Dr.

Faika Ahmed El-Tatawi

Assis. Prof. of Pathology

Faculty of Medicine

Tanta University

Dr.

Noha Nabil Doghim

Lecturer of Dermatology and Andrology

Faculty of Medicine

Tanta University

FACULTY OF MEDICINE

TANTA UNIVERSITY

1999

ACKNOWLEDGEMENT

First and foremost thanks to **ALLAH** *whose magnificent help was the main factor in accomplishing this research work.*

I would like to express my deepest regards, gratitude and appreciation to **Prof. Dr. Fatma A. Abd Rabboh** *Professor and head of Derpartment of Dermatology and Andrology Faculty of Medicine, Tanta University, for her generous and kind help and her continuous valuable supervision.*

I would like to express my deepest gratitude and appreciation to **Dr. Faika Ahmed El-Tatawi** *Assistant Professor of Pathology, Facutly of Medicine, Tanta University, I am very grateful to her for devoting a great of her precious time for supervising my work. I shall always remember her marvelous support, encouragement and guidance to me.*

I wish to express my deep thanks to **Dr. Noha Nabil Doghim** *Lecturer of Dermatology and Andrology Facutly of Medicine, Tanta University, for her sincer cooperation, advice, and her generous assistance which helped me to accomplish this study.*

I owe special gratitude to **Dr. Sayed Mohamed Abd El-Razzic** *Lecturer of Plastic Surgery Facutly of Medicine, Tanta University, for his valuable assistance in my study.*

Finally thanks to all members of Dermatology and Andrology Department, Facutly of Medicine, Tanta University, for their kind support throughout the work.

LIST OF ABBREVIATIONS

AB	:	Antibody
BCC	:	Basal cell carcinoma
BM	:	Basement Membrane
CT	:	Connective tissue
DEJ	:	Dermo-epidermal junction
ECM	:	Extra-cellular matrix.
EGF	:	Epidermal growth factor
EM	:	Electron microscope
FN	:	Fibronectin.
H&E	:	Hematoxylin & Eosin
IL-I	:	Interleukin-I
LM	:	Laminin
PAS	:	Periodic acid schiff
PBS	:	Phosphate-buffered saline
SCC	:	Squamous cell carcinoma
SCC-A	:	Squamous cell carcinoma antigen

CONTENTS

INTRODUCTION

INTRODUCTION

The cutanous basement membrane (BM) which separates the epithelial compartment from the underlying mesenchyme consists of a large number of matrix macromolecules whose precise interactions are necessary for the stability of the dermo-epidermal junction (DEJ) [1].

The BM in more aggressive forms of BCC as well as in potentially metastasizing squamous cell carcinoma is often discontenous and may lack some of the integral components of the basement membrane zone (BMZ)[2].

One of the integral components of all basement membrane is laminin. Laminin is a large glycoprotein which promotes the variety of biologic functions including cell attachment, spreading, proliferation and differentiation as well as neurite out growth[3].

Also fibronectin is a normal glycoprotein of the human body. It has three forms.

1- Plasma fibronectin.

2- Cellular fibronectin.

3- Cell surface fibronectin.

Fibronectin plays a key role in cell attachment, embryonic development and wound healing[4].

Basal cell carcinoma (BCC) is the most common neoplasm of the skin[2]. Biologically. Although the (BCC) lesions are characterized

by relatively slow rate of growth, it is capable of significant local distruction, previous studies have centered around the basement membrane zone (BMZ) surrounding the tumour islands. In general, intact BM apparently contanining the distinct macromolecular components present in normal cutanous BMZ . surrounding the tumour islands of nodular BCC[5].

AIM OF THE WORK

AIM OF THE WORK

The aim of this work is to perform an immunohistochemical study to examine the expression of laminin and fibronectin in the basement membrane zone of normal human skin, basal and squamous cell carcinoma, to correlate the findings with growth rate and grade of differentiation.

REVIEW OF LITERATURE