سامية محمد مصطفى

شبكة المعلومات الجامعية

بسم الله الرحمن الرحيم

سامية محمد مصطفى

شبكة المعلومات الجامعية

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التوثيق الالكتروني والميكروفيلم

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سامية محمد مصطفى

جامعة عين شمس

التوثيق الإلكتروني والميكروفيلم

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بالرسالة صفحات لم ترد بالأصل

THE SERUM LEVELS OF sE-SELECTIN IN PATIENTS WITH PEMPHIGUS AND BULLOUS PEMPHIGOID, CORRELATION WITH THE NUMBER OF SKIN LESIONS AND RECOVERY AFTER TREATMENT

Thesis
Submitted for Partial Fulfillment of
M.D. Degree in Dermatology and Andrology

By

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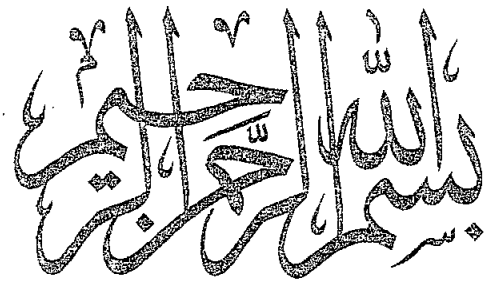

إنما يخشى الله من عباده العلماء

صدق الله العظيم

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LIST OF ABBREVIATIONS

AS-ODNS	Antisense oligonucleotides
BMZ	Basement membrane zone
BP	Bullous pemphigoid
CAMs	Cellular adhesion molecules
CD	Cluster differentiation
DAG	Diacyl glycerol
DIF	Direct immunofluorescence
Dsc	Desmocollin
Dsg-1	Desmoglein-1
Dsg-3	Desmoglein-3
ECs	Endothelial cells
EGF	Epidermal growth factor
ELAM-I	Endothelial leukocyte adhesion molecule-I
ESL-1	E-selectin ligand-1
FS	Fogo selvagum
H & E	Haematoxylin and eosin
HG	Herpes gestationis
ICAM-1	Intercellular adhesion molecule-1
ICAM-2	Intercellular adhesion molecule-2
ICAM-3	Intercellular adhesion molecule-3
IEN-type	Intraepidermal neutrophilic type
IFN-γ	Interferon-γ
IIF	Indirect immunofluorescence
IL-1	Interleukin-1
IP	Incontinentia pigmenti
KD	Kilo Dalton
LCCAMs	Lectin cellular adhesion molecules
Leu-CAMs	Leukocyte cellular adhesion molecules
LFA-I	Leukocyte function antigen-1
MAC-1	Macrophage activation antigen-1
MHC	Major histocompatibility complex
NCAMs	Neural cell adhesion molecules
PAF	Platelet activating factor
PBS	Phosphate buffered saline
PECAMs-1	Platelet endothelial cell adhesion molecules-1
PF	Pemphigus foliaceus
PH	Pemphigus herpetiformis
PLC	Phospholipase-C
PSL-1	P-selectin ligand-1
PV	Pemphigus vulgaris
Sle X	Sialyl Lewis X
TCR	T-cell receptor
TNF	Tumour necrosis factor
VCAM	Vascular cell adhesion molecule
VEGF	Vascular endothelial growth factor
VLA	Very late activation antigen
WBCs	White blood cells

Contents

INTRODUCTION

INTRODUCTION

Pemphigus and bullous pemphigoid are rare dermatoses. Their prevalence ranges between 0.1 and 1 cases/100,000 individuals, with peak of 3/100,000 among jewish people *(Saurat, 1990)*.

They are characterized by acantholytic blisters with intraepidermal (pemphigus) or dermo-epidermal (bullous pemphigoid) localization *(Fabbri, 1993).*

The pathogenesis of these diseases is based on autoimmunity, pemphigus lesions are mediated by auto-IgG directed against keratinocyte desmogleins of 130 and 85 KD, while Bullous pemphigoid (BP) blisters present a cleavage between the epidermis and lamina lucida and are caused by autoantibodies (mainly IgG) directed against proteins of 230 and 180 KD (major antigens) or proteins ranging between 18 and 200 KD (minor antigens*) (Saurat, 1990 and Shirakato et al., 1990).*

Soluble E-selectin is the soluble isoform of a membrane adhesion molecules able to bind leucocytes. It is exclusively expressed by activated endothelial cells and its induction is enhanced by interleukin 1β (IL-1β) and tumour necrosis factor-α (TNF-α) *(Leeuwenberg et al., 1992).*

Adhesion molecules are increased in different inflammatory diseases *(Groves et al., 1991)* few studies are available regarding the serum sE-selectin level in patients with pemphigus and bullous pemphigoid *(Karashima et al., 1992).*

AIM OF THE WORK

The present study will be conducted to evaluate serum level of sE-selectin in patients with pemphigus and bullous pemphigoid in relation to the number of skin lesions as a non-specific follow-up marker suitable to gauge disease intensity overtime.

REVIEW RATURE

THE DESMOSOME/HEMIDESMOSOME COMPLEX

The desmosome is an organelle which is shared by neighbouring keratinocytes (Fig. 1). It is a specialized region of plasma membrane, which link cells to each other and connect the intermediate filaments to the plasma membrane, providing a stabilizing network across the epidermis and many other tissues, particularly those subjected to trauma ***(Parker et al., 1991).***

The desmosome has a characteristic ultrastructure in which the cell membrane of two adjacent cells forms a symmetrical junction with a central intracellular space of 30 nm containing a dense line. Plaques of electron dense material run along the cytoplasm parallel to the functional region, in which three ultrastructural bands can be distinguished, an electron-dense band, next to the plasma membrane, a less dense band, then a fibrillar area. Intermediate filaments loop through this region ***(Holbrook, 1994).***

The narrow extracellular compartment separating the outer leaflet of the two cell membranes constitutes the desmosomal core which is continuous with the epidermal intercellular space. Just inside the plasma membrane of each of the adjacent keratinocytes there is a proteinaceous plaque which serves as insertion point for the intermediate filaments that converge from the cytoplasm ***(Schwartz et al., 1990).***

The molecular components of the desmosome have been fall into two categories (Fig 2). The first group are large molecular weight polypeptides which make up the desmosomal plaque and include