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شبكة المعلومات الجامعية التوثيق الالكتروني والميكروفيلم





# جامعة عين شمس

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# Effect of Narrow Band Ultraviolet B Therapy on Tissue Levels of Interleukin-33 in Egyptian Vitiligo Patients

Thesis

Submitted for Partial Fulfillment of Master Degree in **Dermatology, Venereology & Andrology** 

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#### Tist of Abbreviations

Abb.	Full term
AD	. Atonic dermatitis
AIS1	-
	Basic fibroblast growth factor
	Calcineurin inhibitors
	Chronic obstructive pulmonary disease
CSs	
	Cytotoxic (CD8+) T lymphocytes
DCs	
	Dermatology Life Quality Index
ET-1	
	Food and drug administration
HeNe	_
	Hypothalamic-pituitary-adrenal axis
	Heat shock proteins
	Inflammatory bowel disease
$IFN_{\gamma}$	•
<i>IL-1</i>	
	Interleukin-1 alpha
<i>IL-1β</i>	<del>-</del>
	Invariant natural killer T cells
	Khellin plus UVA light
LTC-4	-
	Monochromatic Excimer Laser
<i>MOP</i>	
	Narrow-band ultraviolet B
IVI' KD	Nuclear factor kappa-light-chain-enhancer of activated B cells

## Tist of Abbreviations cont...

Abb.	Full term
NK	.Natural killer
Nrf2	.Nuclear factor E2-related factor 2
•	.Non-segmental vitiligo
	Oral mini pulse therapy
PUVA	.Psoralen UVA
QOL	.Quality of life
-	.Rheumatoid arthritis
ROS	.Reactive oxygen species
SCF	.stem cell factor
<i>SLE</i>	.Systemic lupus erythematosus
SSUV	.Solar stimulated ultraviolet radiation
ST2	.Suppressor of tumorigenicity 2
SV	.Segmental vitiligo
TCR	. T cell receptor
<i>Th</i>	.T-helper
<i>TMP</i>	. Trimethylpsoralen
<i>TNF-α</i>	.Tumor necrosis factor alfa
UV	. Ultraviolet
UVA	.Ultraviolet A
UVB	.Ultraviolet B
<i>VASI</i>	.Vitiligo Area Scoring Index
VEGF	.Vascular endothelial growth factor
<i>VETF</i>	.Vitiligo European Task Force
<i>VIDA</i>	.Vitiligo disease activity

#### Abstract

**Background:** Vitiligo is an acquired pigmentary disorder of unknown etiology, affecting approximately 1 % of the world population, without predilection for race or sex. It is characterized by white macules and patches, whose size increases over time, due to the loss of melanocytes.

**Aim and Objectives:** The aim of the work was to study the influence of the NB-UVB radiation therapy on tissue level of IL-33 in patients with vitiligo

**Subjects and methods:** This is a prospective cohort study which was carried out on 10 patients diagnosed as having non -segmental vitiligo stable for at least 6 months duration. All patients were selected from the dermatology outpatient clinic of vitiligo, Ain-Shams University Hospitals.

**Results:** There was a statistical significant difference in VASI score before and after treatment with NB-UVB (p value 0.008), NB-UVB has no effect on tissue expression of IL-33 regarding percentage of cells (p value 0.102), staining intensity (p value 0.375) and the overall score (0.106).

**Conclusion:** NB-UVB is an effective treatment in patients with vitiligo. VASI score was decreased significantly at the end of NB-UVB treatment. NB-UVB has no effect on tissue expression of IL-33 regarding percentage of cells, staining intensity and the overall score.

**Keywords:** NB-UVB, VASI, Vitiligo, IL-33, Prospective cohort.