Evaluation of the Efficacy of Homologous Autoinoculation Therapy in Treatment of Multiple Recalcitrant Warts

Thesis

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

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Tist of Abbreviations

Full term Abb. 5-FU 5-Fluorouracil ALA Amino-laevulinic acid **BCG** Bacillus Calmette-Guérin **BLT** Buschke-Löwenstein tumor CIN Cervical intraepithelial neoplasia **CMV** Cytomegalovirus CO_2 Carbon dioxide DNA Deoxyribonucleic acid **DNCB** Dinitrochlorobenzene **DPCP** Diphencyprone \mathbf{E} Early region **EBV** Ebstienbar virus External genital warts **EGWs** Er:YAG Erbium: Yttrium/ Aluminum/ Garnet \mathbf{EV} Epidermodysplasia verruciformis HIV Human immunodeficiency virus **HPV** Human Papillomavirus Herpes simplex virus HSV IL Interleukin INF Interferon **KTP** Potassium-Titanyl-phosphate \mathbf{L} Late region LCR Long control region MMR Mumps, measles and rubella MwMycobacterium w Nd:YAG Neodymium: Yttrium/ Aluminum/ Garnet OCT Open clinical trial **PDL** Pulsed dye laser

Tist of Abbreviations (Cont...)

Abb.	Full term
PDT	Photodynamic therapy
PIN	Penile intraepithelial neoplasia
RCT	Randomized controlled trial
RRP	Recurrent respiratory papillomatosis
SCC	Squamous cell carcinoma
TB	Tuberculosis
TCA	Trichloroacetic
Th1	T helper 1
TNF	Tumor necrosis factor
VAIN	Vaginal intraepithelial neoplasm
VIN	Vulvar intraepithelial neoplasia

Introduction

Warts (Verrucae) are benign skin tumors caused by double stranded DNA viruses called Human Papilla viruses (HPV) (*Wenner et al.*, 2007).

A range of types of warts have been identified, varying in shape and site, as well as the type of human papilloma virus involved. These include common warts, flat warts, palmer warts, plantar warts and genital warts. Many observations have suggested that wart proliferation is controlled by the immune system, particularly the cell mediated immunity (*Zamannian et al.*, 2014).

Recurrences are frequent because of HPV infection persistence in peri-lesional skin (*Aubin and Laurent*, 2006). Treatment aims to cure the patient's physical and psychological discomfort, and to prevent the spread of infection (*Micali and Dall'Oglio*, 2004).

The treatment options for warts are numerous, and the choice depends on the number, size and location of lesions (*Scheinfeld and Lehman*, 2006).

There are current trends towards the use of immunotherapy in treatment of warts, as the immune system seems to play an important role in the control of warts infection so incidence of warts increases in subjects with cell-mediated immune defect such as (Human immunodeficiency virus (HIV) infected patients, malignant diseases... etc) (Scott et al., 2001).

Currently, wart autoinoculation therapy is an easy simple technique which helps in inducing adequate cell-mediated immune response (*Das et al.*, 2016). To the best of our knowledge, no previous studies have been reported in evaluation of the efficacy of wart autoinoculation in the treatment of recalcitrant warts till now in Egypt.

AIM OF THE WORK

The aim of this study is to evaluate the efficacy and safety of homologous autoinoculation therapy in treatment of multiple recalcitrant warts in Egyptian patients.