

# بسم الله الرحمن الرحيم





# شبكة المعلومات الجامعية التوثيق الالكتروني والميكروفيلم



# جامعة عين شمس

التوثيق الإلكتروني والميكروفيلم

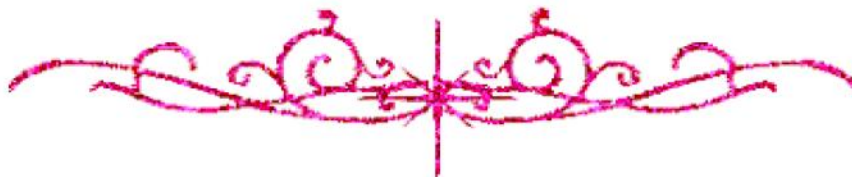
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بالرسالة صفحات  
لم ترد بالأصل





# **IONIC ANTI-VIRAL INTRALESIONAL THERAPY IN PLANTAR WARTS**

*A Thesis*

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

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بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

قالوا

سبحانك لا علم لنا  
إلا ما علمتنا إنك أنت  
العليم العظيم

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## ABSTRACT

**Background:** Warts (verrucae) are an extremely common, benign, and usually self-limited skin disease. Their size ranges from a few millimetres to several centimetres. The normal skin lines are interrupted by skin coloured to brownish-grey proliferations, the diagnosis is established clinically; no supplementary histologic or virologic investigations are needed.

**Objective:** The aim of this two armed double blinded randomized clinical trial was to evaluate the clinical efficacy of intralesional combined digoxin and furosemide in the treatment of multiple planter warts.

**Methods:** This study included 40 patients with plantar warts, they were divided into 2 groups, 20 patients per group, the first group received intralesional normal saline, one injection session every week for maximum 5 injection sessions. The second group received intralesional combined digoxin and furosemide, one injection session every week for maximum 5 injection sessions. All the patients were recruited from the Dermatology outpatient clinic at Ain-Shams University Hospital and Shobra General Hospital during the period From July 2018 to July 2019.

**Results:** There was no statistically significant difference between the 2 studied groups as regard size of wart before treatment. While there was statistically significant difference between the 2 studied groups as regard size of wart after the 5<sup>th</sup> session. Also there was a steady increase in the response to treatment in group 2 showing an earlier response to treatment and most of patients with excellent and very good response to treatment after the 5<sup>th</sup> session. There was no statistically significant difference between the 2 studied groups as regard the number of warts before treatment. While there was statistically significant difference between the 2 studied groups as regard the number of warts after the 5<sup>th</sup> session. There was no statistically significant correlation between age, sex, disease duration and response to treatment (as regard reduction in number of warts) after the 5<sup>th</sup> session in group 2. While in group 1 there was no reduction in number of warts after the 5<sup>th</sup> session. There was a statistically significant difference between the number of warts before and after receiving the active treatment in group 1, in group 2 and for both groups together (all patients).

**Conclusion:** We concluded from this study that intralesional injection of combined digoxin and furosemide offers effective alternative form of treatment for plantar warts in adults. It is inexpensive and safe to treat plantar warts.

**Keywords:** Plantar Warts; digoxin; furosemide

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## *List of Abbreviations*

| Abb.                        | Full term                       |
|-----------------------------|---------------------------------|
| ACE .....                   | Angiotensin converting enzyme   |
| AHA .....                   | Alpha-hydroxy acid              |
| AMP .....                   | Antimicrobial Peptide           |
| APCs.....                   | Antigen-presenting cells        |
| BCA.....                    | Bichloroacetic acid             |
| BCC.....                    | Basal cell carcinoma            |
| BCG .....                   | Bacillus Calmette Geurin        |
| BPO .....                   | Benzoyl peroxide                |
| CHF .....                   | Congestive heart failure        |
| CO <sub>2</sub> laser ..... | Carbon dioxide laser            |
| DCP .....                   | Diphencyprone                   |
| DNCB.....                   | Dinitrochlorobenzene            |
| DPCP.....                   | Diphenylcyclopropenone          |
| ECG.....                    | Echocardiography                |
| EDV.....                    | Epidermodysplasia verruciformis |
| H & E .....                 | Hematoxylin and Eosin stain     |
| HF.....                     | Heart failure                   |
| HPV .....                   | Human papilloma virus           |
| ICVT.....                   | Ionic contraviral therapy       |
| IFN- $\alpha$ .....         | Interferon-alpha                |
| IFN- $\gamma$ .....         | Interferon-gamma                |
| IL-1.....                   | Interleukin 1                   |

## *List of Abbreviations Cont...*

| Abb.               | Full term                               |
|--------------------|-----------------------------------------|
| IL-2.....          | Interleukin 2                           |
| IV.....            | Intravenous                             |
| KOH .....          | Potassium hydroxide                     |
| LCs .....          | Langerhans cells                        |
| LEEP .....         | Loop electrosurgical excision procedure |
| MMR.....           | Measles, mumps, and rubella vaccine     |
| NKs .....          | Natural killer cells                    |
| PCR .....          | Polymerase chain reaction               |
| PDL .....          | Pulsed dye laser                        |
| PPD.....           | Purified protein derivative             |
| RRP .....          | Recurrent Respiratory Papillomatosis    |
| SADBE .....        | Squaric acid dibutyl ester              |
| SCC .....          | Squamous Cell Carcinoma                 |
| TCA.....           | Trichloroacetic acid                    |
| Th .....           | T-helper cells                          |
| TLR .....          | Toll-like receptor                      |
| TNF $\alpha$ ..... | Tumor necrosis factor $\alpha$          |

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