

# Treatment of some Dermatological cases by Laser Therapy

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## Abstract

This study was aimed to evaluate the successful of skin laser therapy on some dermatological cases. A study was carried out on 327 patient suffering from different dermatological cases included the following cases; Port-wine stains 42 case, Hemangiomas 57 case, Wrinkles 61 case, Warts 82 case and Scars 85 case. All those patients were expected to Laser therapy applied on effected skin. The result showed 95.1% as a total healing percent among 327 different skin lesions. There were no significant differences in the healing percentages among the five cases.

From this study we can conclude that, Laser therapy can give highly successful therapy against different diseases of skin.

**Key word:** Dermatological diseases, Laser therapy, skin and lesion.

## Introduction:

The skin is the body's largest organ, acting as a protective shield from the external environment <sup>(1)</sup>. Many skin infections are not life-threatening, resources and energy go towards diseases that have greater impacts on human health. An additional, albeit understudied concern, however, is the psychosocial and occupational effects of skin disease <sup>(2)</sup>. The overall lifetime incidence of skin disorder was found to be 15 out of the 50 nations in Europe, with eczema (7.9 percent) and psoriasis (5.2 percent) topping the list of conditions, with vitiligo finishing behind them (1.9 percent) <sup>(3)</sup>. As the climate has worsened in recent years, the number of cases of skin disease has risen. Concern over global warming has escalated to becoming a threat to the general welfare <sup>(4)</sup>. The number of skin diseases has an on-going and day-to-day operation, requiring you to take care of the customer and helping the client maintain his or her quality of life <sup>(5)</sup>.

Skin disorders are fourth of the most frequent causes of human injury, causing a huge burden of suffering without death. Despite this, the warnings, often sick people should not go to a doctor. So the real incidence of skin disease may be greater, but it may not include those who go to the doctor <sup>(6)</sup>.

Patients, public and private institutions, and beauty salons are increasingly utilizing lasers and IPL equipment. The typical patients with such procedures are those with excess vessels (such as a port-wine stain), color (like for example, tattoos), skin disorders (psoriasis, skin cancers, etc.), and tumors. With such a diverse list of applications, it poses concerns about the impact, side effects, and appropriateness of laser and Intense Pulsed Light (IPL) treatments <sup>(7)</sup>.

This study aimed to evaluate the efficacy of Laser in treatment of some dermatological cases.

## Materials and methods:

A study was carried out on 327 patient suffering from different dermatological diseases included the following cases; Port-wine stains 42 case, Hemangiomas 57 case, Wrinkles 61 case, Warts 82 case and Scars 85 case. All those patients were expected to Laser therapy applied on effected skin.

The statistical analysis was done by using SPSS software and according to <sup>(8)</sup>.

## Results and discussions

The results showed 95.1% as a total healing percent among 327 different skin lesion. There were no significant differences in the healing percentages among the five cases (Table 1).

**Table 1. results of usage Laser on different dermatological cases**

Type of skin lesion	No. of patient	No. of healed patient	Percentage
Port-wine stains	42	40	95%
Hemangiomas	57	50	87.7%
Wrinkles	61	57	93.4%
Warts	82	80	97.5%
Scars	85	84	98.8%
<b>Total</b>	<b>327</b>	<b>311</b>	<b>95.1%</b>
<b>Chi- Square value</b>	<b>--</b>	<b>---</b>	<b>0.94 NS</b>
<b>NS: Non significant at P&lt;0.05</b>			

According to Goldman's initial study, modern dermatology might have access to a large range of laser equipment, sometimes very close to one another, that can treat a wide range of cutaneous diseases with absolute effectiveness and protection<sup>(9)</sup>.

Laser treatment of port-wine stains is based on selective photothermolysis of the affected vessels. It has been reported that laser can treat most cases of port-wine stains successfully<sup>(10)</sup>. As a consequence, laser systems are the most effective at removing fine wrinkles, especially around the eyes and mouth by activation of collagen production<sup>(11)</sup>.

It has been concluded that the absence of warts at far-flung locations means that the CO<sub>2</sub> laser therapy's effects modulate the immune system, expanding its use past mere excision or ablation<sup>(12)</sup>.

There are many laser devices on the market that can effectively treat different forms of scars. Specific patient and scar features are carefully analyzed to assess the right form of action for laser scar control<sup>(13)</sup>. The current results were in agreement with results of<sup>(14)</sup> who reported that via photobiomodulatory operations, irradiating scars with low incident levels of laser energy, such as diode laser low level light therapy, may reduce symptoms such as discomfort and itchiness while also improving scar appearance.

#### Conclusion:

From this study we can conclude that, Laser therapy can give highly successful therapy against different diseases of skin.

**Ethical Clearance:** The Research Ethical Committee at scientific research by ethical approval of both environmental and health and higher education and scientific research ministries in Iraq

**Conflict of Interest:** The authors declare that they have no conflict of interest.

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