



CODEN [USA]: IAJPBB

ISSN : 2349-7750

**INDO AMERICAN JOURNAL OF
PHARMACEUTICAL SCIENCES**

SJIF Impact Factor: 7.187

<https://doi.org/10.5281/zenodo.702342>Available online at: <http://www.iajps.com>

Research Article

**APPLICATION OF HIGH FREQUENCY LASER IN
COSMETOLOGY****¹Dr. Lubna Zahir, ²Dr Saad Ahmad, ³Zahra Shoaib, ⁴Dr Farwa Sattar**
¹PMDC no 18583-N, ²PMC Registration No: 750612-01-M, ³750911-01-M, ⁴79163-P**Article Received:** June 2022**Accepted:** July 2022**Published:** August 2022**Abstract:****Introduction:**

Disease with cosmetics is spreading very rapidly. Many skin specialists and dermatologists are paying attention on this issue. They are trying to solve those issues as soon as possible because due to skin issues people are getting mentally upset.

Methodology:

Dermatologists are using different techniques to measure and calculate the reasons of skin issues. They also study the skin of patients who use cosmetics on a regular basis and get deep penetration of cosmetics. They use several methods and high quality of ultrasounds to predict the cause of skin burn and many other issues.

Results:

In the results, we can say that dermatologists and pathologists use several methods and technologies to treat the effective skin. They collect several points related to skin disease and also get the reviews of many websites which help them to complete their study. They also checkout the promises and applications mention of the products; they take action on them which cause harm.

Conclusions:

These cosmetics sometime lead to acne issues, aging of skin, dullness of skin and many other issues related to skin arise. People should use good quality products and they should avoid using these products on a regular basis.

Keywords: *ultrasounds, dermatological methods, skin damage, scars.***Corresponding author:****Lubna Zahir,**

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Please cite this article in press Lubna Zahir et al, *Application Of High Frequency Laser In Cosmetology.*, Indo Am. J. P. Sci, 2022; 09(8).

INTRODUCTION:

As the time is passing, people are showing more interest and attention towards their skin. They use several methods and technologies to study their disease and try to calculate its causes. People are aware from their skin type and its issues due to the use of cosmetics. If we discuss the relation of skin with the medical field, we can say that its value is increased. Many dermatologists start using technologies on the basis of skin and cosmetics [1]. They use several methods to treat skin disease and scars. They use several microscopic methods and ultrasounds to study their skin deeply. With the help of microscopic testing, they check their skin deeply and some time they also check upper two layers of skin to measure the penetration of cosmetics and its effects the skin [2]. They take a whole review of skin and how much it is damage. They check it on the dermatological basis and perform several tests to get accurate results [3]. In this study, they used to measure the specific changes that are involved in skin disease as the aging of skin, change in their blood vessels, pigmentation and forming appendages. Patients who visit to the hospitals for their treatment, doctors present in these hospitals totally depend on the results of microscopy, through which they can measure the damage of skin. Dermatologists use many tests and microcopies to evaluate results, but they did not get able to measure all the disease patients are having related to skin. They check the depth of the skin and use some applications related to the skin to solve it by using different treatments. Many pathological and dermatological show characteristics of skin related to its damage and medically treated [4]. This study is about the skin damage and many other researchers are also paying attention this topic and mentioning the ways of its treatment in the forms of microscopy and ultrasounds [5].

APPLICATIONS AND METHODOLOGIES:

Some scars have seen in the skin of patients during treatment. These scars were cutaneous and patients were feeling pain and itching due to these scars on their skin. Dermatologists use high power of ultrasounds to check the penetration of cosmetic products and its damage. They deeply check the layers of skin and its damage. They used ultrasounds to calculate the damage of skin and its effects towards the skin. They measure the scars on the skin and under the skin layers with the help of ultrasound machines. They also attempt some echo test to measure the scars and its damage to the skin. They help patients to get relief from pain of scars by applying some medicines. In the process of testing and treatment, they check the depth of scars, the flow of blood towards they skin and

many other points related to skin damage. With the help of echo and ultrasounds, they get able to measure the results and check the level of depth and it effects the skin. In this study, they select about 45 patients who were suffering from skin damage and scars. They start performing tests on them and try to collect all the measurable and valuable points related to this study. They also perform these tests on people with healthy skin. They want to compare both damage and healthy skin and calculate the results related to it. After performing echo tests and ultrasounds, they conclude some results that some of these scars were present on the upper part of the dermis and some of them were penetrated deeply in the lower dermis of the skin. All of them were having different types of skin as some of them were having thicker layers of skin and some of them have a thin layer. They show some results related to these scars as these scars appear due to the improper treatment of skin and due to improper medications, these wounds take longer time to heal and start spreading out. This increasing level of these scars may spread sometimes due to the physical and mental stress. People start taking the stress of their skin issues and this stress also affects their skin and harms their skin. They also perform some colored tests to measure the level of blood flow in the skin and its affects towards the skin.

RESULTS:

In the results, we can see that their skin color changes after skin damage. Their skin color shifted from pink to purple. In this research, they collect 230 patients whose skin color changes from pink to purple and also the thickness of skin damage. They use some indicators to measure the level of skin damage and show its effects on the skin. After skin damage, the thickness of the skin occurs and the flow of blood in that particular area increases gradually. Due to this increase in the blood, it changes the color of the skin and turns it into the purple color. About 71 patients were selected for the treatment of skin with the help of ultrasounds. They give them proper treatment and check deeply the flow of blood in the skin, the thickness of skin and its level of damage. After collecting each and every point related to these patients, they measure the result. They also selected about 62 patients for the treatment of echo. They check all related points to patients and take measurements under an echo test. They also take some colored tests to check the level of damage and flow of blood in the skin. After taking these tests, they conclude the results. They take a full-time examination of their physical fitness. Due to skin issues, physical health of the patients also got damage.

| Technologies | Advantages | Disadvantages | Applications |
|----------------------|-------------------|-----------------------|------------------------------|
| Photography of skin | Accessible | Structures of display | Skin diseases and its volume |
| Dermoscopic study | Outline and color | Depth of image | Diagnosis and treatment |
| Microscopic study | Cell level | Parts of the dermis | Skin disease of vessels |
| Optical measurements | Single cell level | Depth of scanning | Skin of human beings |

They have seen abnormalities in the patient's skin. They use to measure the level of acne in patients by testing with the help of ultrasound and echo. They use several tests to measure with the help of echo. Main issues are considered as the acne disease. It causes severe issues, and is increasing rapidly. Acne is damaging the skin on a high scale and also damage glands which help to get penetrated and freshen up the skin. They perform laser treatment to treat the acne and reduce the percentage of acne patients with the help of this process. Due to skin damage, the layers of the skin become thin, but after the laser treatment, their skin becomes thick and moves towards the normal life. After performing several therapies on these patients, they get accurate and effective results. These therapies help people to get good results and get rid of acne diseases. These therapies show their results more effective towards young people are compared to older age. Skin of aged people show less results as compared to younger because of difference in their skins. The skin of older people will be wrinkled and loose as compared to younger patients.

DISCUSSION:

In this study, we have discussed about the issues related to the skin. Skin damaging occurs due to the use of cosmetics in excessive amount [6]. Due to overuse or expired cosmetics, some with the name of big brands but low quality products start damaging the skin. It causes harmful effects and damage our skin badly. Acne scars, skin burn, damaging the layers of skin and many other issues arise [7]. These skin diseases move them towards the aging of skin and severe damage of skin. It also changes the color and texture of the skin. Due to these cosmetics, the pinkish tone of the patient's skin changes to purple because due to products, the skin of their face become thin, due to this issue, overflow of blood in their skin occur, which cause damage and change the color of the skin. Patients who got affected with this skin aging and skin damaging issues, they should get properly hydrated. Because hydrated body can help to get rid of skin damage and help to get heal more easily and early [8]. Changes in the skin are due to the use of cosmetics on a regular basis. Another aspect of skin damage is photo aging. It occurs when the patient got connection with any form of light. If we talk about the main causes and

damage the skin, so we can conclude some results related to echo tests, the thickness of the skin and its density towards the layers of the skin as the upper, lower or the outer layer of the dermis. They also check the roughness of the patient's skin with the help of ultrasound. After taking an ultrasound test, they measure the thickness of the skin and its effects on the flow of blood. In this way, they will be able to measure the process and effects of the photo aging on the human body. By treating these skin issues, the dermatologists suggest tablets of vitamin C to treat the issues of skin. It helps the skin to produce excessive level of collagen in the body and reduce the level of stress in their bodies. They show some results related to this study that use of vitamin C reduces the photo aging and skin damage and help to heal soon [9]. Dermatologists suggest that if patients will get proper nutrients and good diet with proper medication, their issues can be treated in the period of 4-5 months. They also give some medications and injections to these patients to treat skin issues. Severe damage of skin can be treated by performing proper methods and therapies. They perform several ultrasound tests to measure the exact values and results of these issues. When they start their treatment, they also use ultrasounds to check the exact penetration of injection and effects of medicines. They measure that the therapies and injections they are given to them is reaching on its proper place and showing its positive results or not. Some women try to change the shape of their lips by lip filler, but it shows negative effects and cause severe issues [10]. To solve out these negative results, they move towards the dermatologists to treat their lip issues. They also perform ultrasounds and echo tests to measure the vessels and flow of blood in their lips. When they will collect all points related to their lip damage, they will start their treatment. Some patients also use the filler of cheeks or skin, looks attractive but sometimes it goes wrong and show harmful effects. These types of skin issues show lots of disturbances and damages of skin. These damages of skin also disturb their physical activities and increase the level of stress in their bodies.

CONCLUSIONS:

For the treatment of skin, ultrasounds with the high frequency range can be used. By treating them with the

help of ultrasounds, we can get positive results and treat them. We will be able to treat the scars on the skin, acne issues, flow of blood and many other issues related to skin with the help of ultrasound. We can see clearly about the flow of blood and skin damage. Some tests related to screening, ultrasound and echo helps to know the cause of skin damage and several other methods as use of medication in the form of vitamin C and some other medicines were used to treat these issues. Patients should get hydrated and get proper diet with full of vitamins and nutrients to treat their skin issues.

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