



ORIGINAL RESEARCH PAPER

Dermatology

COMPARATIVE STUDY OF EFFICACY OF EXCIMER LASER AS A MONOTHERAPY VS COMBINATION OF EXCIMER LASER & OTHER TOPICALS IN TREATMENT OF LOCALISED PLAQUE PSORIASIS

KEY WORDS: Excimer laser, combination therapy, localized plaque psoriasis.

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ABSTRACT Excimer laser is an effective modality in treatment of localized plaque psoriasis. It is a form of focused UV-B light with the wavelength of 308 nm. In cases of localized plaque psoriasis, excimer laser can give the patients good and faster results as compared to traditional treatment modalities. This article focuses on effectiveness of Excimer laser as a monotherapy in treatment of localized plaque psoriasis vs effects of combination therapy of both excimer laser and concurrent topical steroids in the treatment of same.

INTRODUCTION:

308 nm excimer laser is widely used in dermatology for many diseases including psoriasis ^{[1][2]}. Although laser has demonstrated clinical efficacy, there is lack of data regarding comparison between efficacy of the Excimer laser as monotherapy and with combination of topical medications.

AIMS AND OBJECTIVES:

To compare the efficacy of excimer laser as a monotherapy vs combination of excimer laser & other topicals in treatment of localized plaque psoriasis.

Study design: Comparative study

Study population:

Patients of localized plaque psoriasis attending Dermatology OPD at Dr. Punjabrao Deshmukh Medical College, Amravati during the period of April 2021 to June 2021.

Study setting: Tertiary care hospital.

INCLUSION CRITERIA:

1. Patients of localized plaque psoriasis attending Dermatology OPD in tertiary care hospital.
2. Patient willing to participate in the study & have given written consent.

EXCLUSION CRITERIA:

1. Pregnancy and lactating mothers ^[3].
2. Regular follow up not possible

MATERIALS & METHODS:

Total 50 patients were included in the study. Diagnosis of plaque psoriasis was done with appropriate history & clinical examination. We divided patients into 2 categories.

First group of patients received treatment as Excimer laser alone. 2-3 sessions per week were given for 6-8 weeks. While second group of patients received the combination of treatment i.e. Excimer laser concurrently with topical medications. In topical treatment, we gave moderately potent topical steroids such as Mometasone furoate 0.1%, Flucinolone acetonide 0.025%.

Photographic evaluation and comparison of the effects was done after every 2 weeks and the data was stored.

Follow up:

Photographic evaluation of lesions was done every 2 weeks and the data was stored. Then that was compared with the previous data.

RESULTS:

Out of 25 patients who were given treatment as Excimer laser monotherapy, 16 patients showed significant improvement after 4 weeks, results were not satisfactory in 6 patients after 6 weeks and 3 patients were excluded due to irregular follow up.

On the other hand, 20 out of 25 patients who were receiving combination therapy showed improvement in lesions as well as symptoms within 2-3 weeks while 3 patients were excluded because of loss of follow up. Results were unsatisfactory in 2 patients after 6 weeks. The photographic response to the combination therapy is shown in figures 1-

CONCLUSION:

Combination therapy of Excimer laser and other topical medications is more effective in treatment of localized plaque psoriasis as compared to Excimer laser alone.

LIMITATIONS:

1. Cannot be used in generalized and extensive psoriasis ^[4].
2. Risk of minor skin burns especially on the trunk.
3. Lesions on the hands & feet are relatively resistant to therapy ^[5].

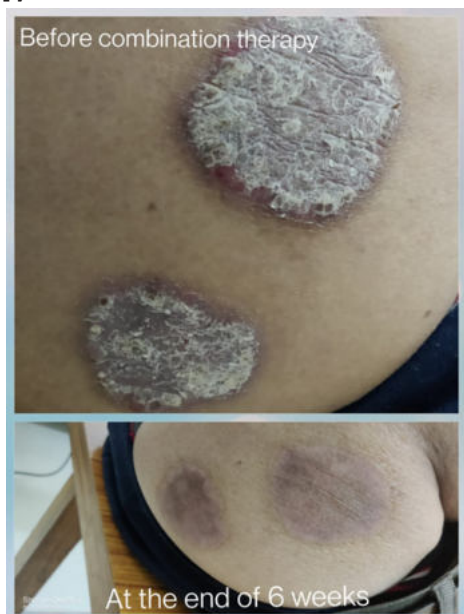


Fig 1: clinical picture of plaque psoriasis over gluteal region before treatment & after 6 weeks of combination therapy.



Fig. 2: Comparison of lesion over lower back after 6 weeks of combination therapy.

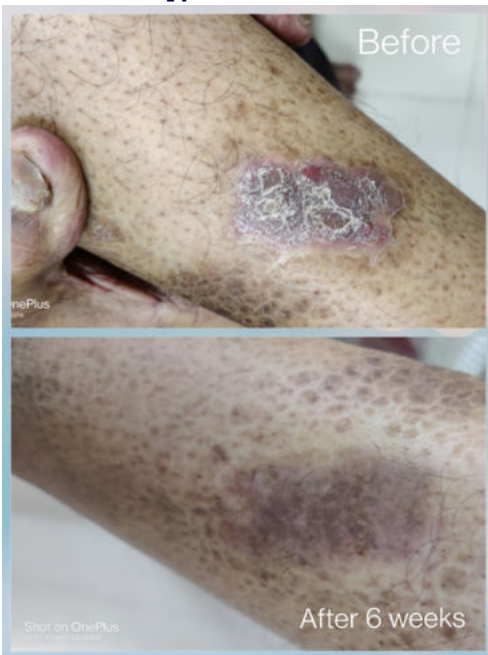


Fig 3: clinical picture showing response of psoriatic plaque over leg to treatment of Excimer laser.

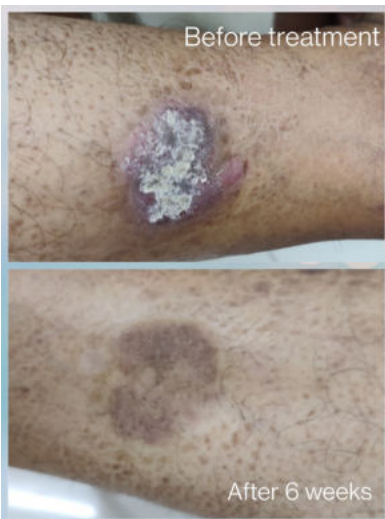


Fig.4: comparative pictures of psoriatic plaque over left lower leg before treatment & after 6 weeks of combination therapy of excimer laser & topical steroids.

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