Low concentration of imiquimod cream as a new-topical therapy of melasma

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Abstract:

Background: Melasma is a common skin problem and topical therapy remain the mainstay of treatment.

Objectives: to evaluate imiquimod cream in low concentrations (0.16%, 0.31%, 0.58%) in treatment of melasma and record any side effects for this drug mainly vitiligo and leukoderma during the course of treatment.

Patients and Methods: thirty-four patients with melasma were included in this study. The patients were divided into three groups: group A ,B and C Every patient was instructed to apply the treatment twice daily and to be seen every 2 weeks for months and also instructed to apply a broad spectrum sunscreen with SPF>30 before sun exposure during treatment period. .The severity of melasma was assessed by melasma area and severity index (MASI) score.

Results: Twenty-four patients with melasma completed the study and all patients in group (A,B and C) were females (100%)and their ages ranged from 24 to 42 years.

In group A, nine patients were treated with imiquimod cream 0.16 %. The MASI score before treatment was 6.11 ± 2.47 SD, which after treatment it became to 5.87 ± 2.30 SD, so the average decrease in MASI score was 0.24. This represents a (2.98 %) of improvement and was statistically not significant (P value=0.833229).

In group B, eight patients were treated with imiquimod cream 0.31 % .The MASI score before treatment was 7.56 ± 3.20 which after treatment it became 7.36 ± 3.30. This represents a (3.49 %) of improvement and was statistically not significant (P value = 0.903421).

In group C, seven patients treated with imiquimod cream 0.58 %. The MASI score before treatment was 10.85 ± 8.32 which after treatment it became 10.35 ± 7.81. This represent a (3.68 %) of improvement and was statistically not significant (P value =0.909153).

The comparison of the percentage of improvement among the 3 groups showed no significant difference (P value =0.966763).

No side effect reported apart from slight burning sensation and irritation reported in few patients.

Conclusion: Imiquimod cream in low concentrations (0.16 %, 0.31 % and 0.58 %) was useful as mild bleaching agent for treatment of melasma and fortunately imiquimod cream in these concentrations caused no significant side effect like leukoderma or vitiligo although it had been used for long time.

Key words: melasma ,imiquimod ,leukoderma and vitiligo