

Topical Azelaic Acid 20% In the Treatment of Acne Vulgaris: A Clinical Trial in Kuwait

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SUMMARY

Fifty patients with mild to moderately severe acne were treated with topical Azelaic acid 20% cream twice daily for 12 weeks. No other systemic or local treatments were given. Sixteen percent showed very good improvement while 35.26% showed good and fair improvement respectively. Twenty two percent of patients showed no improvement.

There were no significant side effects seen, and patients with comedonal acne showed maximum improvement. We think that Azelaic acid 20% cream offers a similar efficacy to other available topical medications but with less side effects.

INTRODUCTION

Topical Azelaic Acid 20% is a new topical treatment for acne which was accidentally discovered during the treatment of hyperpigmentary disorders in 1983^(1,2,3) where clinical improvement was noticed among the treated areas.

The formation of comedones is the main pathologic factor in acne. This happens through the hyperkeratotic occlusion of the follicular canal and impact of the horny cells in the sebaceous follicles.

Azelaic acid works through its antibacterial effect which causes reduction of skin surface bacterial count, more important the bacteria in the pilosebaceous follicles where the chemotactic process begins^(4,5,6).

MATERIALS AND METHODS

Fifty patients with mild to moderately severe acne were instructed to use Azelaic acid 20% cream topi-

cally twice daily. No other local or systemic treatment was used. The patients were seen every two weeks.

The measurement of the lesions was done through a skin window to calculate the number of comedones, papules or pustules at each visit.

This study was carried out for a period of 12 weeks.

RESULTS

After 12 weeks of twice daily application of 20% Azelaic acid cream, it gave satisfactory clinical results. The therapeutic effect was noticed in the first 4-6 weeks then gradually increased over the rest of the trial period.

The overall physician/patient rating of therapeutic efficacy is shown in Table 1. Whereas 16% of patients showed between 70-85% improvement and were rated as markedly improved, 36% had between 50-70% improvement, and 26% were rated as having fair improvement. Twenty two percent of the patients showed no improvement.

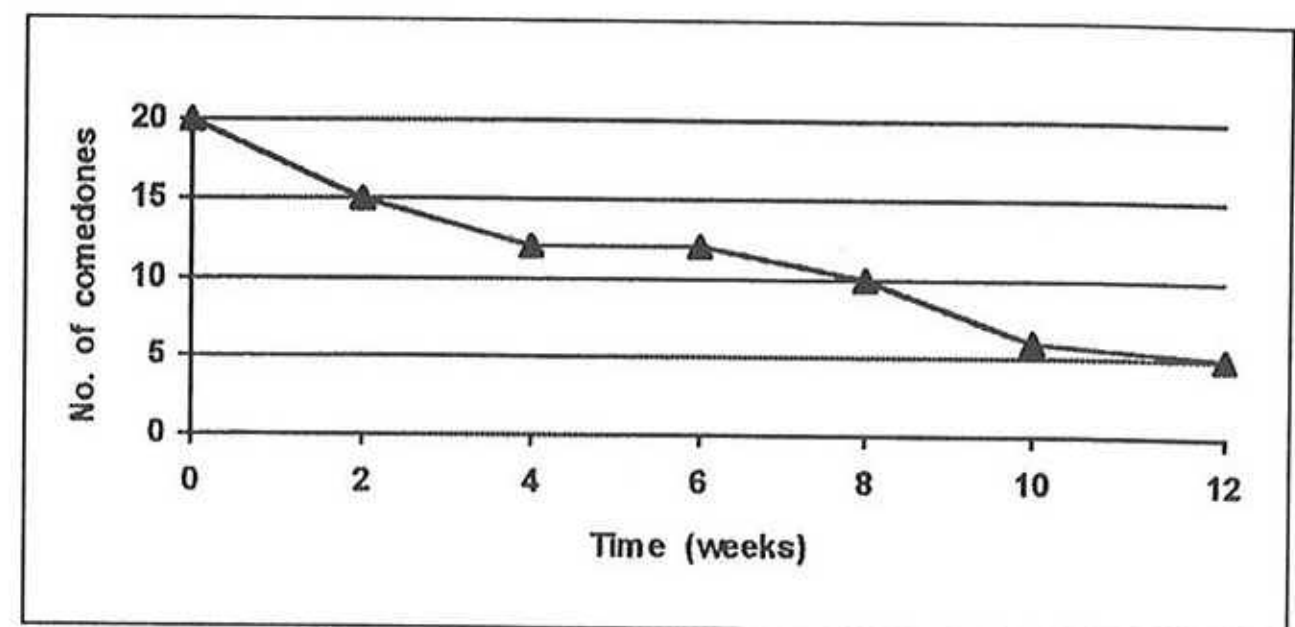


Fig 1. Effect of Azelaic acid 20% on comedonal acne.

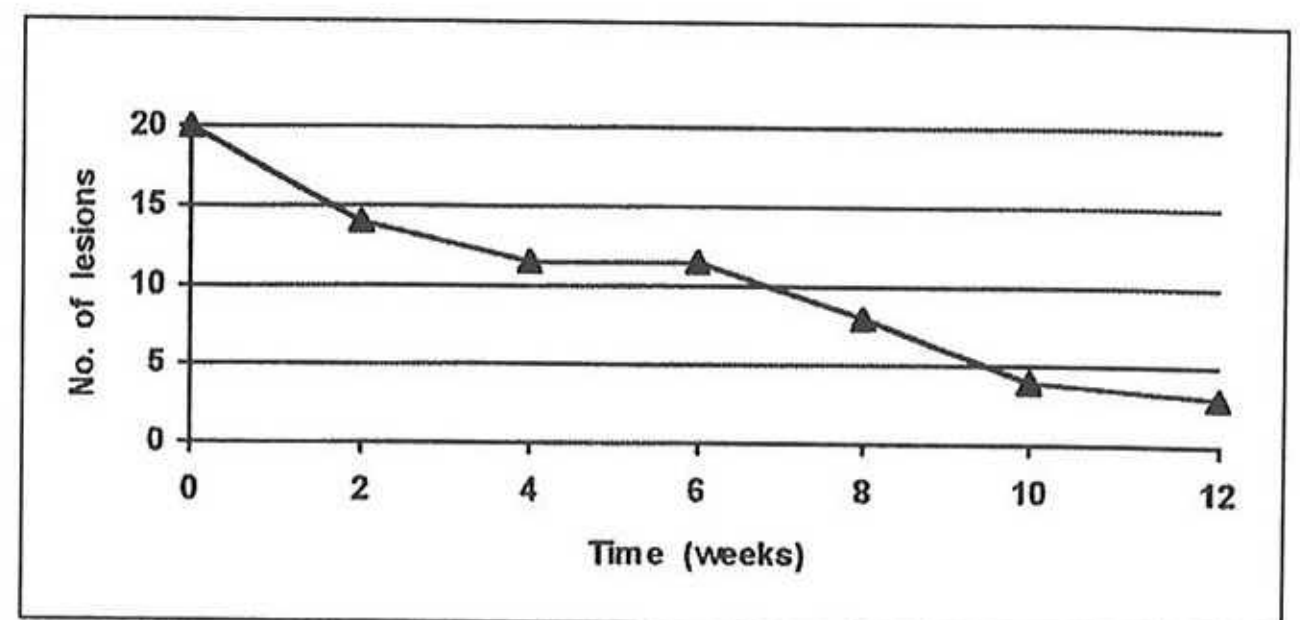


Fig 2. Effect of Azelaic acid 20% on papulo-pustular acne.

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Figure 1 shows the average number of Comedones and the degree of improvement in 3 months period. The number of Comedones were greatly reduced over the period of this trial. Figure 2 shows the number of papules and pustules and the degree of improvement along the period of this trial.

Azelaic acid cream has no drying effect as compared to other topical applied acne preparations and is cosmetically accepted by most of the patients. The degree of tolerability of the drug was quiet high. Eighty one percent of the patients affirmed that the drug was tolerable, while 9% showed no tolerability towards Azelaic acid, and 10% had no comment.

The side effects in general are negligible, where 3% of cases showed scaling, 15% showed transient cutaneous burning and 5% had mild erythema. These side effects were overcome by reducing the twice daily application to a single daily use, or sometimes

the drug had to be stopped for few days then gradually reintroduced again.

Some patients after completing the trial redeveloped few lesions in a period ranging from 4-6 weeks whom needed to start over the same regimen again. However, a period of 5-6 weeks was enough to clear them.

In conclusion, Azelaic acid 20% is a new promising topical treatment for acne vulgaris, it offers a similar efficacy to other well known topical anti-acne drugs but significantly better tolerability and less side effects.

Although papulo-pustular acne showed good improvement, yet comedonal acne showed better results. More severe forms of acne will require systemic treatment in addition to Azelaic acid to maximize its therapeutic effect.

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