**A COMPARISON OF A NOVEL BENZOYL PEROXIDE SYSTEM WITH A COMBINATION BENZOYL PEROXIDE AND CLINDAMYCIN PRODUCT: A 2-WEEK SPLIT-FACE STUDY OF EFFECTIVENESS AND TOLERABILITY**

**INTRODUCTION**

Benzoyl peroxide (BPO) has both bactericidal activity against Propionibacterium acnes and comedolytic activity, and therefore offers efficacy against both inflammatory and non-inflammatory acne lesions. However, the bioavailability of BPO is commonly suboptimal in formulations, which can limit its clinical efficacy and preclude the use of high concentrations of BPO that could be enhanced, if possible, by the clinical efficacy of BPO could also be enhanced.

A novel solubilized BPO formulation has recently been developed that offers high bioavailability of BPO in gel that enter the follicles and on the skin surface than either a generic 5% BPO formulation or a combination 5% BPO/clindamycin product 1.

Another split-face randomized study has now been performed to compare the clinical efficacy and tolerability of this solubilized 5% BPO gel versus that of a commercially available BPO/clindamycin product 2.

**METHODS**

**Study design**

- Investigational, randomized, split-face study

**Key inclusion criteria**

- Mild to moderate facial acne
- 12-40 inflammatory lesions
- 12-40 non-inflammatory lesions
- Fairly even distribution of lesions on face
- 17-40 years of age
- No photosensitivity
- No use of topical retinoids and antibiotics in the week preceding study start
- No use of comedolytic medications during study

**Key exclusion criteria**

- Patients with other skin conditions on the face (other than acne)
- Facial scar or surgery
- Allergy to benzoyl peroxide or sunscreens
- Board would interfere with the study evaluations
- Uncontrolled systemic disease or multiple independent diseases
- Consumption of other medicated products or any new cosmetics on the face
- Immunological disorders
- Pregnancy or lactation

**Treatment regimen**

- All patients applied one of the following treatment regimens to one side of their face and the other regimen to the other side of their face twice daily for 2 weeks.

**Outcome measures**

- The investigator evaluated patients at baseline, week 1, and week 2 in a blinded fashion.
- The products were dispensed from pumps or pads and the patients were instructed to apply them once a day to both treatment areas and to ensure compliance.
- The mean scores for erythema, dryness, itching, and stinging/burning before the test products were applied.

**RESULTS**

- Of 34 patients enrolled, 27 (79%) completed the study and were assessed for effectiveness at week 2.

**DISCUSSIONS**

**REFERENCES**


**CONCLUSIONS**

The regimen of a novel solubilized 5% BPO gel plus a 2% salicylic acid-based formulation for comedo reduction and in lesions with the BPO/clindamycin combination product 1. After 2 weeks of treatment, the solubilized BPO regimen had a greater reduction in inflammatory lesion count. However, the bioavailability of BPO in commercially successful formulations is commonly suboptimal in gel that enter the follicles and on the skin surface than either a generic 5% BPO formulation or a combination 5% BPO/clindamycin product 2.

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