

**THE SAFETY AND EFFICACY OF
AZELAIC ACID IN THE MANAGEMENT OF
MILD TO MODERATE ACNE VULGARIS**

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ABSTRACT

This paper provides a structured review of literature about the safety and efficacy of Azelaic acid (AA) in the management of mild to moderate Acne Vulgaris (AV). A comprehensive search of PubMed, Cochrane Library, Medline and other resources was conducted to identify the papers that study the benefits, efficacy and adverse effects that occurred in the management of mild to moderate Acne Vulgaris (AV) in those patients receiving AA topical therapy. Of 279 articles uncovered from the search, 52 articles were relevant but only 5 articles met both inclusion and exclusion criteria. Among the articles sourced, three studies were comparative studies, which were between topical AA 20% and topical Erythromycin 2%, topical AA 20% and topical Clindamycin 1%, topical AA 20% and topical Metronidazole 1%. One study was on topical AA and topical Clindamycin as well, but investigated on the emergence of resistant Coagulase-Negative Staphylococci (CNS) noted before and after usage of topical Clindamycin 1% therapy, and only one study compared topical AA 20% with placebo. Based on the selected studies chosen, significant improvement in acne grades were observed with topical AA 20% which were clinically similar in efficacy to topical Erythromycin 2% and topical Clindamycin 1%, but not to topical Metronidazole 1% cream. Similarly, the achievement of improvements of acne grades without bacterial resistance, were seen in the majority of the patients who were treated with topical AA 20%, while the emergence of bacterial resistance was increasingly seen in patients treated with topical Clindamycin 1% cream. Generally, topical AA 20% therapy was found to be well-tolerated without occurrence of major side effects, except for mild pruritus or mild burning sensation, unlike topical Clindamycin 1 % or topical Erythromycin 2 % which was closely related to scaling, erythema etc. This study was aimed at giving an insight about the efficacy of naturally occurring alternatives such as AA, in the topical management of mild to moderate acne, especially in view of the fact that widespread antibiotic resistance is well known to reduce the efficacy of the standard management of mild to moderate acne.