A systematic review of benzoyl peroxide for acne vulgaris.

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Abstract
Objective: Comparative trials of benzoyl peroxide (BPO) have yielded contradictory results on its effectiveness for acne vulgaris. The aim of the study was to synthesise the evidence for the effectiveness of BPO-containing topical products for facial acne vulgaris. Design: Systematic review. Methods: The Cochrane Central Register of Controlled trials, Cochrane Library, MEDLINE and other relevant databases were searched without publication date or language restriction. Results: We identified 22 trials involving 2212 participants; 12 trials compared BPO as single agent while the other 10 trials compared BPO in combination products. All trials reported lesion count as the outcome measure but only five trials provided numerical data. However, pooling of data from these trials was inappropriate due to variations between trials in terms of acne severity, comparator used and trial duration. Overall the study quality was fair but most studies had some bias particularly in method of random generation and allocation concealment. Although the results provide some evidence that BPO reduces acne-lesion count, the available evidence is not robust enough for firm conclusions. Conclusions: There is no high quality evidence that topical BPO improves facial acne vulgaris, and further research is needed.

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