

Dehydroepiandrosterone (DHEA) Supplementation in Rheumatic Diseases: A Systematic Review

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Abstract

Background: Dehydroepiandrosterone (DHEA) is an adrenal hormone used to treat rheumatic conditions such as systemic lupus erythematosus (SLE), Sjogren's syndrome (SS), rheumatoid arthritis (RA) with controversial results.

Aim: To review the results of DHEA use in rheumatic diseases.

Methods: PubMed, Scielo, Scopus, and Embase databases were systematically searched for articles on the treatment of rheumatic diseases with DHEA between 1966 and April 2023.

Results: Twenty-one studies were identified: 13 in SLE, 5 in SS, 2 in RA, and 1 in fibromyalgia. DHEA use in SLE has shown a mild to moderate effect on disease activity, a positive effect on bone mineral density (BMD), and improved fatigue. The studies on SS showed a decrease in symptoms of dry mouth, but its performance did not differ from placebo in disease activity. In RA, a questionable effect on disease activity was noted. The only study on fibromyalgia failed to show any improvement. The drug was well tolerated; mild androgenic effects were the most common complaints.

Conclusion: DHEA seems to have a place in SLE treatment, where it improves BMD and disease activity. The use in RA, SS, and FM is questionable.

Keywords: DHEA; Sjögren's syndrome; dehydroepiandrosterone; dermatomyositis; fibromyalgia; rheumatic diseases; rheumatoid arthritis.

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