The Role of Calf Stretching in the Management of Plantar Fasciitis: A Literature Review

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ABSTRACT

About 10% of adults suffer from plantar fasciitis, a common musculoskeletal condition marked by inflammation and pain in the plantar fascia. As first-line therapies, conservative management techniques like stretching exercises are frequently advised. Because tense calf muscles can put more strain on the plantar fascia, calf stretching, in particular, has drawn interest as a possible therapeutic strategy. While anecdotal evidence and clinical practice suggest the benefits of calf stretching, there is a need for robust scientific evidence to confirm its effectiveness. This warrants a review to compile the data currently available regarding the benefits of calf stretching in the management of individuals with plantar fasciitis. Therefore, this literature review aims to evaluate and discuss the effectiveness of calf stretching. A comprehensive literature search was conducted within the databases PubMed, EMBASE, and Cochrane Library for full-text articles published in the English language between 2019 and 2024, exploring the treatment of plantar fasciitis with calf stretching. The search strategy utilised terms such as "plantar fasciitis", "calf stretching", "conservative treatment," "pain relief" and "exercise therapy" employing Boolean operators. No articles were excluded based on their geographical origin or the manner in which their study design was presented. A total of 1286 articles were identified, out of which only six met the inclusion criteria. Analysis of the identified studies suggested that stretching can be a highly effective treatment for plantar fasciitis, leading to significant improvements in pain and foot function. Plantar fascia and calf stretches, especially when implemented consistently over a longer duration (8 weeks or more), provided substantial and lasting relief. While individual responses may vary, stretching was found to be a safe and effective approach for managing plantar fasciitis and improving overall foot health. This review highlights the limited available evidence on the specific efficacy of calf stretching for plantar fasciitis. The small number of studies included limits the strength of the conclusions. Further research with rigorous methodology and larger sample sizes is urgently needed to establish the definitive role of calf stretching in the management of this prevalent condition.

Keywords: Conservative treatment, Exercise therapy, Muscles, Pain.