Low-Concentration Topical Capsaicin for Chronic Neuropathic Pain in Adults

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Objective
To assess the efficacy and tolerability of topically applied low-concentration (less than 1%) capsaicin for treating chronic neuropathic pain in adults.

Type of Review
The current review examined the evidence from seven double-blind randomized, controlled trials that compared the application of low-concentration (less than 1%) topical capsaicin cream with placebo or other active treatment for a minimum duration of six weeks.

Relevance for Nursing
Neuropathic pain is caused by nerve damage or dysfunction as a result of injury or disease, and is described as chronic if experienced on most days for a three-month period. It has been variously described as a burning sensation; sharp, stabbing, or shooting pain; or pain similar to an electric shock. Topical creams such as capsaicin can be applied externally and are taken in through the skin. When applied, capsaicin, the active compound in chili peppers, binds to the sensory receptors in the skin that are responsible for sending pain signals. Adverse events such as burning and stinging at the application site have been noted in the use of capsaicin, so healthcare providers should determine whether the treatment is efficacious and tolerable in adults, particularly for those involved in nursing care. This review is an update of a review previously published in 2009, which combined high- and low-concentration formulations of capsaicin. This update examines only low-concentration formulations of capsaicin.