TOPICAL 8% CAPSAICIN IN PERIPHERAL NEUROPATHIC PAIN AT HOSPITAL DEL TRABAJADOR: A Case Series – FR 594.

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BACKGROUND

Capsaicin is a compound extracted from spicy chili peppers. It is used in the form of patches at concentrations of 8% in applications lasting 30 to 60 minutes in patients with peripheral neuropathic pain (Allodynia), desensitizing nociceptor fibers through the TRPV1 receptor (Anand 2011, Bridges 2001). This phenomenon enables the reduction of pain intensity and/or area (Fig. 1).

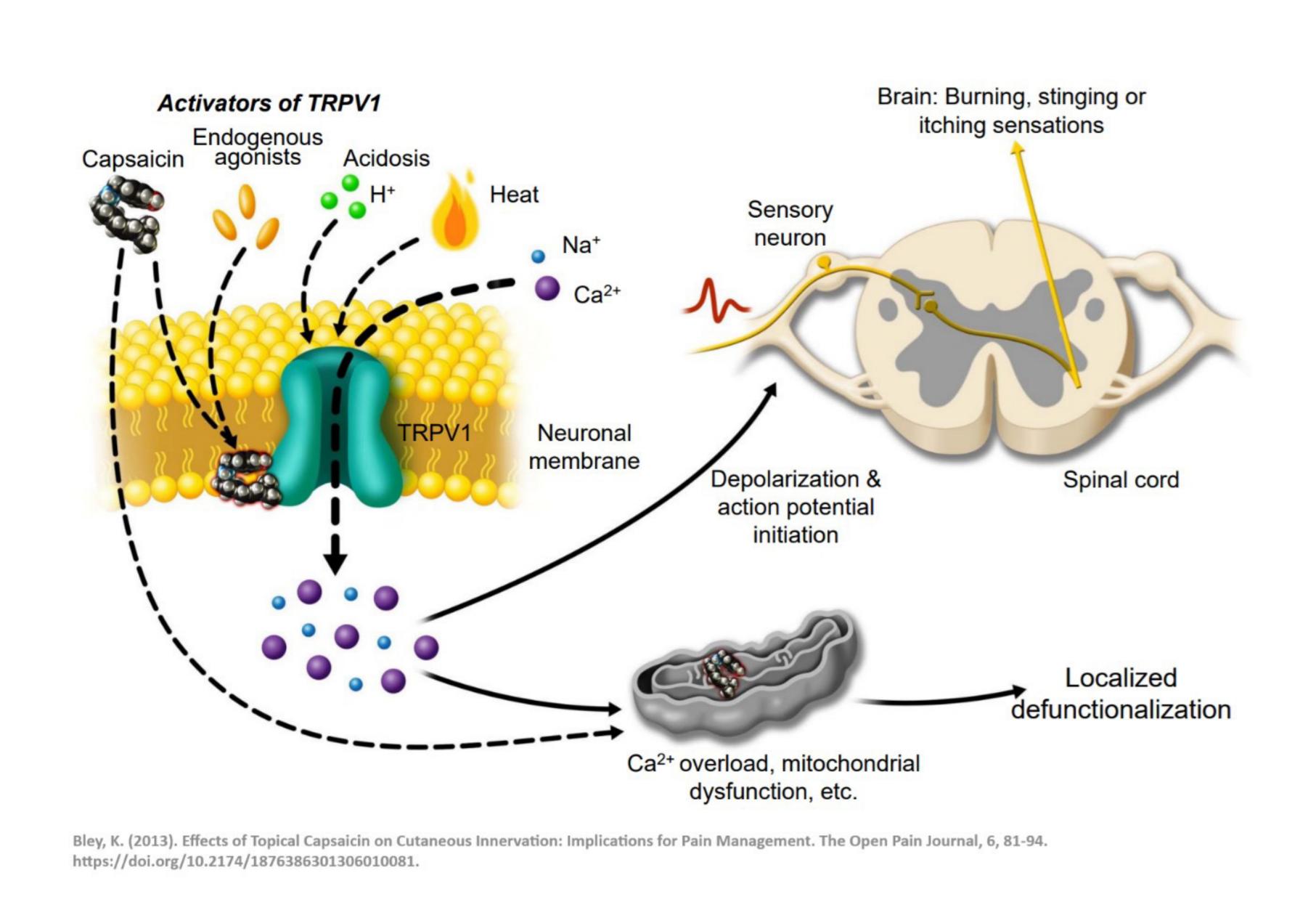


Fig. 1: Mechanism of action

It was incorporated for treating neuropathic pain in Chile in late 2022 and has been available in the Hospital del Trabajador since early 2023.

This first case series aims to characterize the intervened population between April 2023 and April 2024 in Hospital del Trabajador and describe the response to patch application according to the sessions administered, both in terms of perceived improvement, reduction in intensity and area of allodynia, and the immediate and late reported adverse effects.

METHODS

This single-center case series study recorded cases from patients over 18 years old with peripheral neuropathic pain who were part of the first 8% capsaicin patch treatment group in the Rehabilitation Department of the Hospital del Trabajador Santiago between April 2023 and April 2024.

People with adverse skin conditions for topical agents and known allergies to peppers or other patch compounds were excluded from the original treatment protocol.

Before treatment, sociodemographic, laboral, and clinical data were collected from medical charts. Treatment perception, pain intensity, allodynia area, number of patch applications, immediate and late adverse effects were recorded from clinical records.

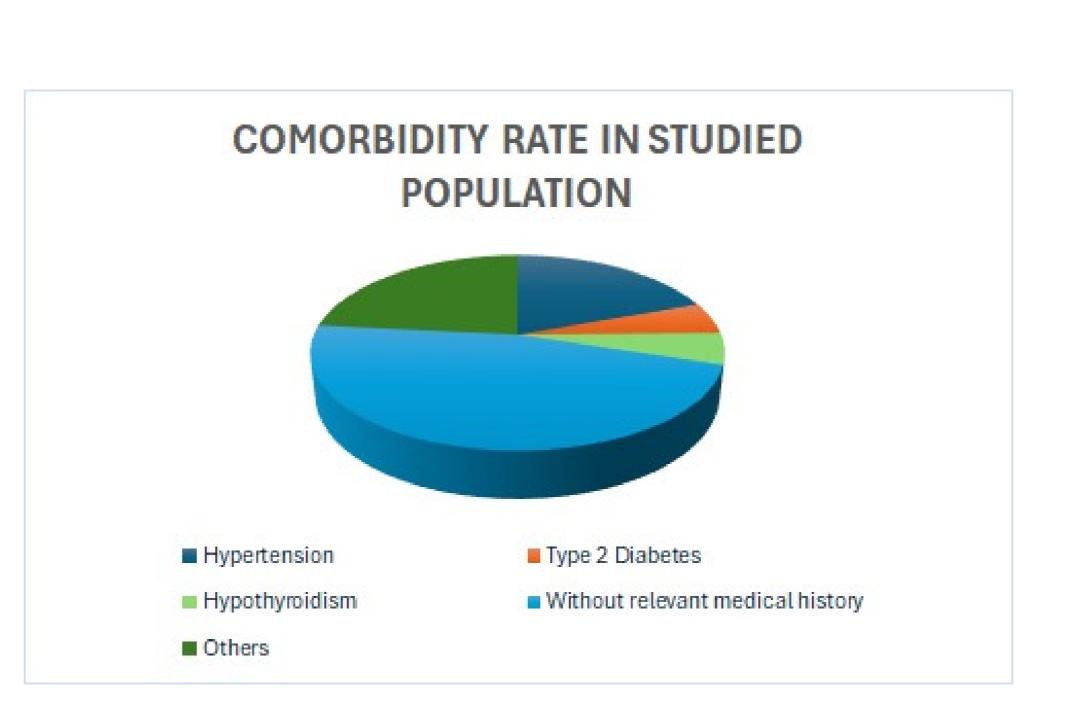
RESULTS

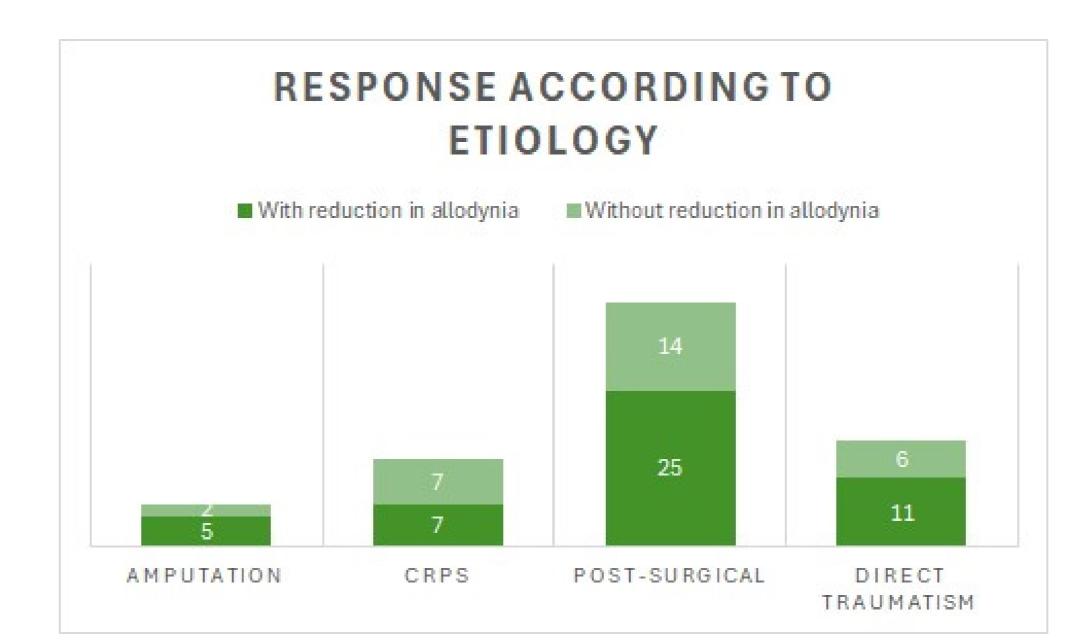
85 cases filled the inclusion criteria. Mean age was 48,8 years SD 11.6 y., and 65% (56) were women. Comorbidities were present in 49.4%, where only 4 patients had Diabetes Mellitus. Neuropathic pain was categorized based on recorded etiologies.

The majority of cases stem from surgical wounds (48.2%), direct trauma (21.2%), Complex Regional Pain Syndrome (CRPS) (20%), and amputation-related allodynia (10.6%). The most common location for the injuries was the lower limb (65.8%).

8 patients were lost to follow-up and were not considered for the response frequencies.

The best response percentage was seen in patients without CRPS, with 65.07% favorable response. Patients with 1 session (43) showed a 55.8% (23) favorable response; those with 2 sessions (17) had a 64.7% (11); those with 3 sessions (16) had an 81.25% (13).













Immediate adverse effects included burning in 55 (64.7%), itching in 48 (56.5%), and pain in 3 (3.52%), while 15 patients (17.64%) reported no discomfort. Late adverse effects were described in just 2 patients (headaches and vomiting).



DISCUSSION

The use of 8% capsaicin patches at Hospital del Trabajador tend to show promising results in managing peripheral neuropathic pain. Increased favorable responses was observed in patients receiving multiple sessions. Patients with direct trauma seems to have a better response rate compared to those with CRPS. Side effects were generally mild, with no reported severe reactions, as it has been reported in other clinical studies (Laklouk 2016). These findings do not establish safety and effectiveness; further studies are required to confirm these aspects in our population.