

# CLINICAL EXPERIENCE WITH THE LIDOCAINE PATCH IN A LATIN AMERICAN POPULATION

## Introduction

Neuropathic pain is a common problem in clinical setting. The reported prevalence is about 5% (1). It has been reported that 16% of diabetic patients and 16 - 20% patients affected with herpes zoster will develop pain. The most common neuropathic peripheral pain syndromes are painful diabetic neuropathy and post herpetic neuralgia (2). In Latin America, there are no reports of prevalence. Estimates in Mexico about painful diabetic neuropathy are 800.000 and 1'920.000 cases per year, and post herpetic neuralgia about 14.550 and 29.100 cases per year, based on a 97 million population (3). All the systemic treatments have been associated with side effects, which limits the escalating doses specially in older people and patients with comorbidities and multiple medications. Sodium channel participation in the pathophysiological mechanisms of peripheral neuropathic pain have been well established (4). Topical lidocaine has been shown to reduce pain in patients with post herpetic neuralgia and allodynia (5).

## Aim of Investigation

Neuropathic pain (NP) is defined as pain arising as a direct consequence of a lesion or disease affecting the somatosensory system, rarely experience complete resolution of their symptoms. We examined the effectiveness and tolerability of the lidocaine patch in a hispanic population with refractory NP states. In Latin America, there is no previous report of this treatment approach.

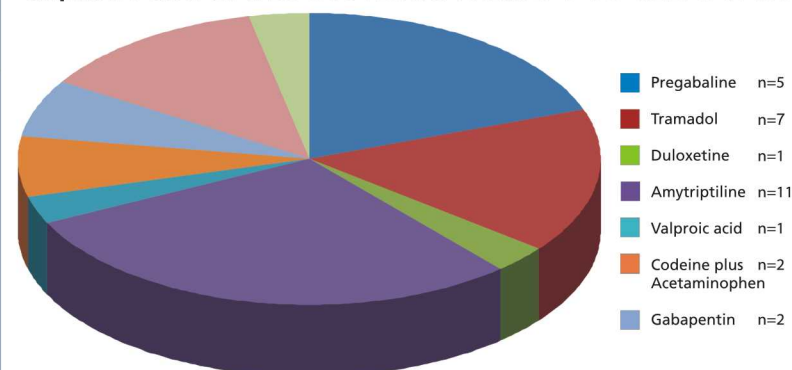
## Methods

In a series of cases we investigated 14 patients with suspected NP states, including intercostal postherpetic neuralgia, postthoracotomy pain, diabetic neuropathy, radiculopathy, post hypertrophic cutaneous lesion, and complex regional pain syndrome. All patients received the lidocaine patch as add on therapy in addition to currently prescribed systemic analgesics that were providing partial pain relief. Evaluation according Visual Analogue Scale (VAS) was performed at baseline and follow up periods. At a follow up visit at 6 weeks in average, pain intensity was evaluated with VAS and patients reported any adverse events.

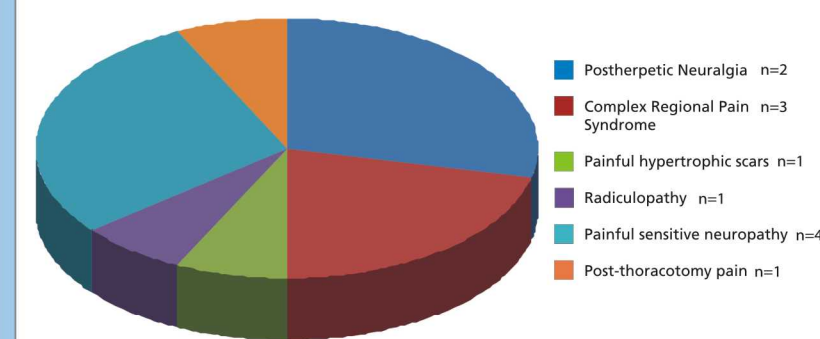
Table 1. PATIENT CHARACTERISTICS

No. Patients	14
Age [range (average)]	23-83 (58,42)
Gender (female/male)	10/4
Baseline pain intensity according VAS [range (average)]	7-10 (8,78)
Pain intensity at the end of follow up according VAS [range (average)]	1-6 (2,67)

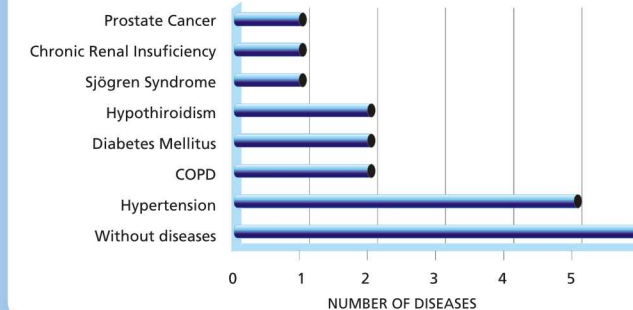
Graphic 1. ASSOCIATED SYSTEMIC THERAPY TO TREAT PAIN



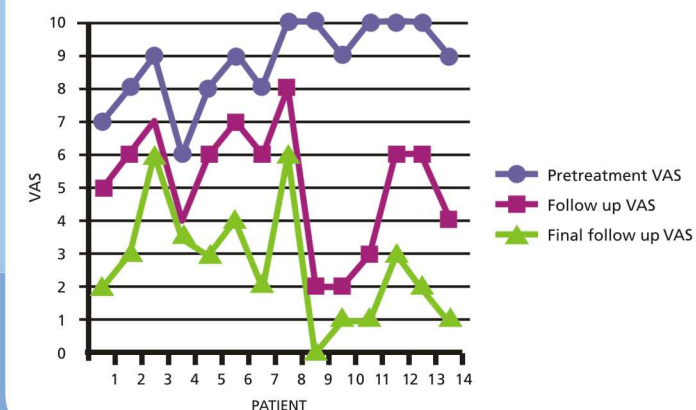
Graphic 2. PAIN DIAGNOSES



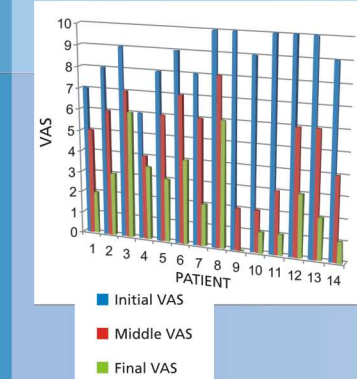
Graphic 3. ASSOCIATED DISEASES



Graphic 4. CHANGE IN VAS BETWEEN PRETREATMENT AND LAST FOLLOW UP



Graphic 5. PAIN RELEASE ACCORDING VAS



## Results

Study participants were 4 men and 10 women with a mean age of 58.4 years. All patients had severe neuropathic pain and were on systemic therapy. The most frequent systemic medication for neuropathic pain were amitriptyline, tramadol and pregabalin. The most frequent pain condition were postherpetic neuralgia and painful sensitive neuropathy. All reported mild to greater pain relief from 33,3% to 100% (mean 66,39%) with the lidocaine patch. The mean duration of treatment (at the time of efficacy assessment) with the lidocaine patch was 7 weeks. There were no reports of serious adverse events.

## Discussion and Recommendation

The lidocaine patch 5% is an effective first line in the treatment of postherpetic neuralgia (6), also is an option as an add on therapy in Latin American patients with other neuropathic pains. This study showed the additional value of lidocaine 5% medicated plaster as add-on therapy in selected cases. It has a low risk of adverse events. This is an initial descriptive study.

Future studies are needed to measure important outcomes as changes in health related quality of life and changes in associated prescribed pain medications.

### REFERENCES:

- McDermott AM, Tölle TR, Rowbotham DJ, Schaefer CP, Dukes EM: The burden of neuropathic pain: results from a cross-sectional survey. *Eur J Pain* 2006; 10(2): 127-35.
  - Neuropathic Pain Insight Study. Life Beyond Gabapentin. Datamonitor, reference code: DMHC1868, February 2004.
  - Guevara U, Covarrubias A, Garcia G, Hernandez S. Parámetros de práctica clínica para el manejo de dolor neuropático. *Revista de Investigación Clínica* Vol 58 N° 2, Marzo-Abril 2006, pp 126-138
  - Devor M. Sodium Channels and Mechanisms of Neuropathic Pain. *The Journal of Pain*, Vol 7, No 15 (January), Supplement 1, 2006; pp 53-512
  - Finnerup N, Otto M, Mc Quay H, Jensen T, Sindrup S. Algorithm for neuropathic pain treatment. An evidence based proposal. *Pain* 118(2005) 289-305
  - Dworkin DH, Connor A, Backonja M, Farrar J, Finnerup N. Pharmacological management of neuropathic pain: Evidence-based recommendations. *Pain* 2007; 132(3): 225-6
- Work presented as a poster at the 12th World Congress on Pain of the International Association for the Study of Pain (IASP), Glasgow, Scotland, UK, 17-22 August, 2008.

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