Treating Chronic Post Herpetic Neuralgia Using Topical Superconcentrated Capsaicin

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**BACKGROUND**

**Post Herpetic Neuralgia (PHN)** is a painful condition that occurs after reactivation of the dormant Herpes Zoster Virus.

**Typically** PHN presents with a unilateral rash affecting a single dermatome which is accompanied by burning, irritation, and hypersensitivity for >3 months.

**Current** treatment includes anticonvulsants, tricyclic antidepressants, narcotic/non-narcotic painkillers, and topical lidocaine.

We propose the utilization of a superconcentrated transdermal patch of capsaicin called Qutenza 8%, which is 300 times more potent than current OTC capsaicin.

The treatment protocol using Qutenza to treat refractory PHN proposes a novel approach to the treatment of this condition.

**METHODS**

Capsaicin is commonly known as the active chemical in peppers which is responsible for their spiciness and the pain and irritation associated with ingesting them.

The mechanism of action of capsaicin is believed to be release of neurotransmitters upon binding to capsaicin nociceptors, mainly TRPV1.

At large doses, capsaicin causes depletion of neurotransmitters and can ultimately lead to nerve fiber denervation.

**Twenty** patients suffering from severe chronic pain from PHN were identified and recruited for the trial.

Our protocol included applying Eutectic Mixture of Local Anesthetic (EMLA) to the affected dermatome for 1 hour prior to Qutenza application to prevent capsaicin-associated pain and irritation.

Following EMLA administration, the Qutenza patch was applied over the affected dermatome.

Qutenza was applied until the pain became unbearable. Vital signs • pain score were reassessed every 15 minutes while the patch was on.

At the conclusion of cases, the patch was removed and a cleansing gel was applied to decrease irritation and pain.

**RESULTS**

Patients were followed up at 2 week and 1 month intervals.

- **16/20** patients reported relief
- **3** patients reported no relief
- **1** patient reported worsening pain

**Chart 1. Changes in Pain Following Qutenza Therapy**

The sixteen responders collectively reported a 53.2% decrease in frequency and severity of pain, assessed using qualitative scales.

**CONCLUSIONS**

We believe that our treatment algorithm is an effective method for controlling the pain associated with PHN, and the relief associated with the treatment outweighs the pain associated with undergoing the procedure.

However, more data is needed to provide statistically significant data and we will continue to gather subjects and analyze results to determine the true effectiveness of this therapy.