

APPLICATION OF PULSED RADIOFREQUENCY IN THE SACRAL CANAL FOR HYPERSENSITIVITY PAIN

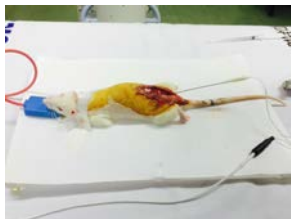
Olav J.J.M. Rohof, MD, PhD, FIPP; Amsterdam, The Netherlands

Introduction

Rat study: PRF in sacral canal (Prof. Ahn South Korea)

Expression of CGRP in L4 and L5 DRG ↗
L4 -L5 dorsal horn GFAP (astrocyte) = Iba-1 (microglia) ↗

➡ anti-inflammatory effect ➡ stimulation of the immune system.



We report the outcome of PRF treatment in the sacral canal for the management of chronic neuropathic pain syndromes.



Methods

Patients with chronic (>6 months) neuropathic pain, suggestive for central sensitization, refractory to comprehensive treatment (conservative –interventional). Informed consent.

Marking **tenderness spinous processus on the skin (1)** as clinical sign of hypersensitization

X- Sacral epidural positioning to S3 SMK 15cm active tip 2 cm (2)

Contrast 1 ml (mostly epidural spread to L5)

Electrostimulation 50 Hz < 2 Volt

PRF 5/5/55V 10 min, looking for “stunning”,



Results

103 pts – 12 months follow –up

Indication [‡]	Nr-of-patients [‡]	>50% pain-reduction [‡]
PHN [‡]	8 [‡]	7 [‡]
FM [‡]	8 [‡]	6 [‡]
FM+arthrose [‡]	22 [‡]	15 [‡]
Osteoarthrose [‡]	28 [‡]	15 [‡]
CRPS [‡]	11 [‡]	9 [‡]
CRPS+arthrose [‡]	6 [‡]	2 [‡]
CNPP [‡]	8 [‡]	4 [‡]
FBSS, FNSS [‡]	9 [‡]	5 [‡]

In case of waning effect – repeat intervention with similar result

Side effects only transient

Headache 5 to 10%

Local pain os coxigis 40%

Conclusion:

Our clinical observation that sacral PRF application reduces severe neuropathic pain, refractory to conservative and interventional treatment should further be investigated