MULTIMODAL STEPPED CARE APPROACH WITH ACUPUNCTURE AND PALMITOYLETHANOLAMIDE FOR CHRONIC REFRACTORY NEUROPATHIC PAIN

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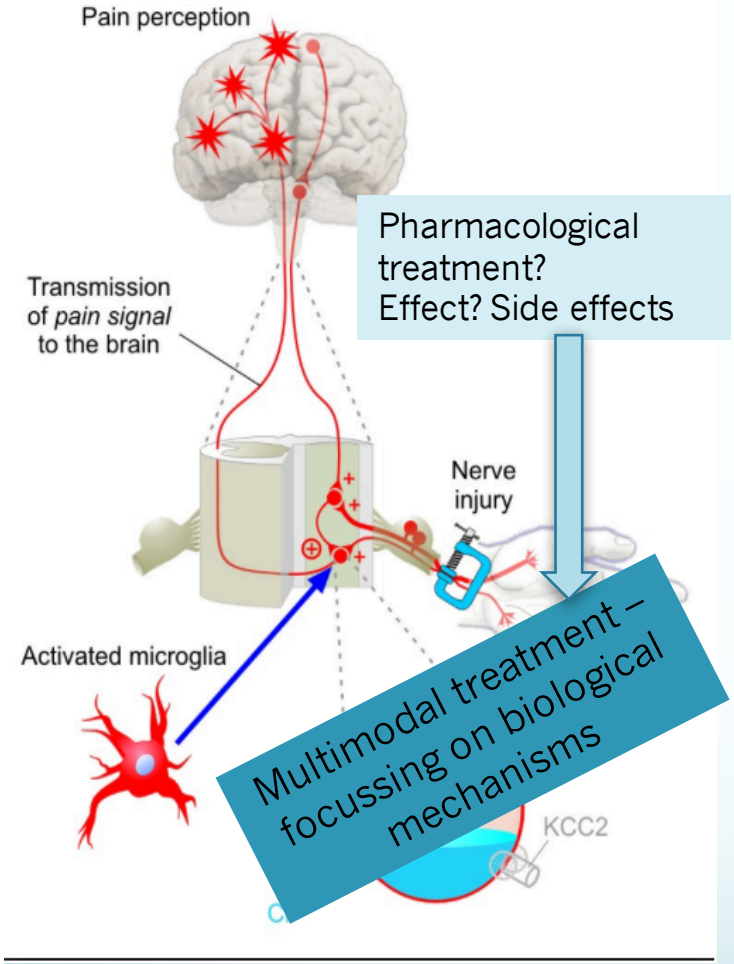

Case report

Pt 40y – 10-year FBSS
standard treatment and SCS failed
VAS 9/10 weight +10kgsleep

Treatment acupuncture and the natural palmitoylethanolamide (PEA), a glial modulator and peroxysome-activated receptor alpha agonist, vitamin D and nutritional rehabilitation.
After 3 sessions: 50% pain reduction -lower dose opioid, improved sleep and QoL.

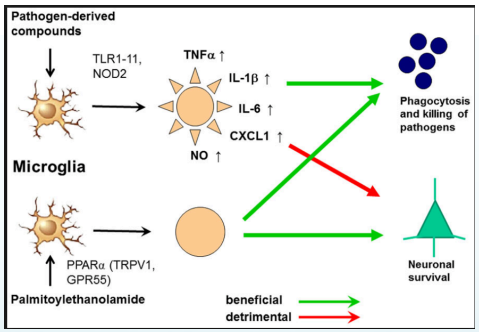

Fig2 Activation of microglia by Toll-like receptor (TLR) agonists and by palmitoylethanolamide (PEA).[10]

Discussion

Neuropathic pain results from a mechanism of peripheral and central sensitization, modulated by spinal and supraspinal control inhibitors

- PEA:. induced antinociception mediated by CB(1), PPARgamma and TRPV1 receptors [8-9]
- It enhances endocannabinoid anandamide (AEA) tissue levels [8-9]
- PEA has an anti inflammatory action through the modulation of local mast cells degranulation it reduces the production of many mediators such as TNFalpha and neurotrophic factors, like NGF

Acupuncture ↗ brain activity in cortical and subcortical brain regions, sensorimotor cortical network activated and limbic-paralimbic-neocortical network deactivated[3]
Acupuncture in this multidisciplinarity is a multimodal pain regulator. The therapeutic and post effect are augmented by the cellular physiological rehabilitation

Combining analgesic strategies with different mechanisms of action, results in additive or even synergistic pain relief. It also permits the use of reduced doses of analgesics resulting in a decreased risk of adverse events.[3]
Combination of acupuncture, PEA and nutritional rehabilitation deserves further investigation and the development of targeted treatment strategies

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