Results:14 days after surgery, animals from group P presented lower nociceptive threshold compared to the other groups, characterizing hypernociception($F(11,108)= 6.045, p<0.05$; 8-10animals/group).After treatment, in nociceptive response there was interaction between tDCSxAcupuncture($F(11,108)=8.230, p=0.00$) and marginally significant interaction between PainXAcupuncture($F(11,108)=3.857, p=0.052$); there were effects of pain and acupuncture over nociceptive response($F(11,108) =24.702$ e $F(11,108) =14.534, p<0.001$ for both). In IL-1β levels, there were interactions between PainxtDCSxAcupuncture($F(11,108)=5.899$, $p=0.004$) and tDCSxAcupuncture($F(11,108)= 7.143, p=0.002$). Finally, over IL-10 levels there were interactions between tDCSxETCC($F(11,108)=3.346, p=0.040$), tDCSxAcupuncture($F(11,108)=3.126, p=0.049$) and PainXAcupuncture($F(11,108)=18.097, p=0.001$).There were effects of pain and acupuncture over nociceptive response($F(11,108) = 14.534$, $p<0.001$ for both).

Conclusion: The association or not of tDCS reversed mechanical hyperalgesia induced by sciatic nerve construction. This analgesic effect may be related to the reduction of central IL1B levels and the increase of IL10.Considering the translational aspect, it is possible to suggest this association between peripheral and central techniques in pain management.

Keywords: *tDCS, acupuncture, cytokines, animal model*

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A14

Trigeminal neuralgia modulated by low-dose naltrexone in rats (LDN)

Maiara Cristina de Cesaro, Camila Lino de Oliveira, Liciane Fernandes Medeiros, Vanessa Silva de Souza, Bettega Costa Lopes, Fabrício Finamor, Luana Xavier Marques, Iraci L. S. Torres, Andressa de Souza. ISBN: 978-1-7342025-1-9

Objective: The aim of this study was to evaluate the effect of low dose naltrexone (LDN) on mechanical facial hyperalgesia in rats submitted to nervous infrared construction and effects on overall biomarker levels (TNF-α, BDNF, IL-10). , TLR4).

Methods: This study was approved by CEUA-HCPA # 2017-0575. Fifty-nine Wistar rats were randomized into groups for 10 days intervention: control (simulated pain) + vehicle; control + carbamazepine (gavage; 100 mg / kg); control + LDN (gavage; 0.5 mg / kg); pain + vehicle; pain + carbamazepine; pain + LDN. Von Frey test was made at baseline, 7 and 14 days after surgery, 1h and 24h after the first treatment dose and 1h after the last treatment dose.

Results: The mechanical threshold between groups was not different at baseline (GHG, $P> 0.05$) and, seven days after surgery, the rats of pain groups presented mechanical threshold lower than the control group (GHG, $P <0.05$). Interestingly, the first dose of LDN or carbamazepine reversed mechanical facial hyperalgesia. However, after 10 days of treatment, both drugs completely reversed mechanical hyperalgesia. In addition, BDNF and IL-10 spinal cord levels were modulated by LDN, with a difference between control and pain groups.

Conclusion: LDN may be an option to relieve and modulate orofacial neuropathic pain; however, further studies are needed to understand the exact mechanisms of the LDN analog effect.

Keywords: *trigeminal neuralgia, naltrexone, animal model.*

A15

Repetitive Transcranial Magnetic Stimulation (rTMS): development of preclinical equipment

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Objective: To propose a Transcranial Repetitive Magnetic Stimulation (rTMS) device for preclinical studies using as a parameter its effect on mechanical allodynia of adult Wistar rats submitted to the neuropathic pain (NP) model.

Methods: 54 60-day-old male Wistar rats divided into 9 groups randomized by the von Frey test: control(C), sham-rTMS control(s.rTMS), stimulated control (C.rTMS), sham surgery(s.S), sham-surgery-sham-rTMS(s.S.s.rTMS), sham-surgery-stimulated(s.S. rTMS) neuropathic-pain(NP), sham-NP-sham-rTMS(s.NP.s.rTMS) and NP-stimulated(NP. rTMS). NP was induced by sciatic nerve constriction(Bennett and Xie, 1988) and was established after 14 days, with the proposed treatment starting: 8 days of daily rTMS for 5min (1ms/1Hz/200mT). The nociceptive response (mechanical allodynia) was evaluated by the paw withdrawal test (Electronic vonFrey). Data were analyzed by one-way ANOVA, followed by SNK, considering significant differences $P <0.05$. Project approved by CEUA/HCPA #2017-0438.

Results: 48 hours after the last day of treatment, animals from the NP group presented lower nociceptive threshold than the other groups, characterizing mechanical allodynia. On the other hand, rTMS-treated animals showed an increase in this threshold but did not reach the nociceptive threshold of control animals ($F (8.52) = 197.40$, $P <0.05$, $n = 5-6$ animals / group), indicating a NP partial reversal.

Conclusions: These preliminary data demonstrate that the proposed rTMS equipment may be a promising tool for use in rats for preclinical studies, as demonstrated in this chronic pain model. Considering the translationality, these

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