

NEUROPATHIC PAIN: THE STIGMATA OF MIGRAINE

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Background. Neuropathic pain depends on dysfunction/alteration along sensory pathways. Its pivotal feature is central sensitization generating semiotics as hyperalgesia/allodyniaMigraine (M) is a neuropathic pain in itself as stressed by our group since the beginning of 1980
Aims. A) Possible existence in M of peculiar central set-up predisposing migraineurs to suffer from differently classified neuropathic pain both in cephalic and extra-cephalic areas. B) Possible analgesia of selective anti-primary headache drug in neuropathic acute pain in M via boosting action on maladaptative central plasticity, transitorily
Methods. Epidemiology: Cross sectional. Enrolled patients underwent eye ball enucleation or avulsion of 2 contiguous teeth or traumatic/surgical limb amputationClinical Pharmacology: Sumatriptan 6 mg subcutaneously in both a) pre-treatment argon laser trabeculotomy and b) post photorefractive keratectomy in M versus controls, rating 0-10 VASStatistic: T-Test, MANOVA, Prevalence Ratio, Poisson Regression
Results. Deafferentation Pain in Cephalic-areaEye ball enucleation- PRs M (n = 89 age 6-55) Controls (n= 101 age 7-56) 4.7 Phantom eye 56 14 Avulsion 2 contiguous teeth M (n = 190 age 19-60) Controls (n= 230 age20-60) infinity-Phantom Tooth 118 0 Deafferentation Pain in Extra-Cephalic-area Limb Amputation (traumatic/surgical) –Phantom limb M (n = 459 age 19-50) Controls (n= 441 age 18-53) 1.8 Phantom Limb 451 225 - 6 mg Sumatriptan versus no treatment Sumatriptan Pre Argon-laser M n=26 age 60-65 Controls n=36 age 60-65 VAS 6.2+1.8SD /1.1+1.3SD* 1.8+1.4 SD/1.6+1.1SD p> 0.0001 Sumatriptan 6mg Post Keratectomy M n= 26 age 30-32 Controls n=36 age 30-32 VAS 8.2+3.6SD /1.2+1.5SD* 1.5+1.6SD/1.8+1.3SD p>0.0001
Conclusions. The outcomes enlighten high scores of positive correlations for deafferentation pain some of which are not so frequent in Italy. The fact enhances positivity of relationships. Also, it is evident an “unexpected” analgesia induced by a selective anti M in acute neuropathic painAll together the outcomes seemingly propose M sufferers are a “race” endowed with a peculiar "neuromatrix" characterized by central sensitization, hyperalgesia/allodynia which might be boosted acutely.