



MORPHINE Response of Groups on Post Procedure Days 28, 64, 108

Figure 7. Morphine analgesia results. Morphine was less effective over time, not due to tolerance, since each dose is separated by weeks. The graph depicts the average of paw withdrawals on pre-drug control days (black) and on paired morphine dose days (white). Results of behavior testing show the average of all four light touch allodynia measures (three von Frey fibers and the brush, top graphs) and the mechanical hyperalgesia (pin prick, bottom graphs). Only on D28 morphine had marked analgesia with pinprick (bottom) and light touch allodynia (top) across all groups, bilaterally. The data suggest a developing opioid induced hypersensitivity to stimuli for allodynia and morphine resistance for hyperalgesia. Mean and S.E.M. *Significant decrease from the paired control day, $p < .05$. + Significant increase from the paired control day, $p < .005$.

Red: indicates development of morphine hypersensitivity that may be related to the gradual development of neural regeneration.

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Fig.7 in "The refined biomimetic NeuroDigM GEL™ model of neuropathic pain in a mature rat" Hannaman et al 2017 Version 2 at F1000Research.com